CMT-EP707

SERVICE MANUAL

Ver 1.0 2002.06

US Model
Canadian Model
AEP Model
UK Model
Australian Model

- CMT-EP707 is composed of following models.
  As for the service manual, it is issued for each component model, then, please refer to them.

COMPONENT MODEL NAME

	CMT-EP707
COMPACT DISC DECK RECEIVER SYSTEM	HCD-EP707
SPEAKER SYSTEM	SS-CEP707

SPECIFICATIONS

Power requirements
North American model : 120 V AC, 60 Hz
European model: 230 V AC, 50/60 Hz
Other models: 230 V AC, 50/60 Hz

Power consumption
U.S.A. model: 38 W
Canadian model: 38 W
European model: 38 W
0.5 W (in the standby mode)
Other models: 38 W

Dimensions (w/h/d): Approx. 180 × 246 × 335 mm

Mass: Approx. 5.0 kg

Supplied accessories: AM loop antenna (1)
Remote Commander (1)
Batteries (2)
FM lead antenna (1)
(Except for European model)

Design and specifications are subject to change without notice.

ACCESSORIES

Part No.	Description	Remark
1-477-185-11	REMOTE COMMANDER (RM-SEP707)	
1-501-843-11	ANTENNA, LOOP (AM)	
1-793-184-21	CONNECTOR (F TYPE ADAPTOR) (FM)	(US, Canadian, Australian)
4-235-505-01	COVER, BATTERY (for RM-SEP707)	
4-239-805-11	MANUAL, INSTRUCTION (ENGLISH)	
4-239-805-21	MANUAL, INSTRUCTION (FRENCH, SPANISH)	(Canadian, AEP)
4-239-805-31	MANUAL, INSTRUCTION (GERMAN, DUTCH, ITALIAN, SWEDISH, POLISH) (AEP)	
4-239-806-11	MANUAL, INSTRUCTION (DANISH, FINNISH) (AEP)	
4-239-806-21	MANUAL, INSTRUCTION (PORTUGUESE) (AEP)	
4-239-806-31	MANUAL, INSTRUCTION (RUSSIAN) (AEP)	
4-239-807-11	MANUAL, INSTRUCTION (GREEK) (AEP)	
4-239-807-21	MANUAL, INSTRUCTION (HUNGARIAN, CZECH) (AEP)	
4-239-807-31	MANUAL, INSTRUCTION (TURKISH) (AEP)	
4-239-807-41	MANUAL, INSTRUCTION (SLOVAKIAN) (AEP)	

MICRO Hi-Fi COMPONENT SYSTEM

9-874-042-01 **Sony Corporation**
2002F0500-1 **Home Audio Company**
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REVISION HISTORY

Clicking the version allows you to jump to the revised page.
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Ver.	Date	Description of Revision
1.0	2002.06	New

SS-CEP707

SERVICE MANUAL

Ver 1.0 2002.06

US Model
Canadian Model
AEP Model
UK Model
Australian Model

- SS-CEP707 is the speaker system in CMT-EP707.

SPECIFICATIONS

Speaker system	Bass-reflex type
Speaker units	
Woofer:	10 cm, cone type
Tweeter:	5 cm, cone type
Nominal impedance	4 Ω
Dimensions (w/h/d)	Approx. 170 × 246 × 185 mm
Mass	Approx. 2.2 kg

Design and specifications are subject to change without notice.

PARTS LIST

Part No.	Description	Remark
A-4433-291-A	SPEAKER UNIT	

SPEAKER SYSTEM

9-874-044-01 **Sony Corporation**
2002F0500-1 **Home Audio Company**
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REVISION HISTORY

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Ver.	Date	Description of Revision
1.0	2002.06	New

HCD-EP707

SERVICE MANUAL

Ver 1.7 2004.02

US Model
Canadian Model
AEP Model
UK Model
Australian Model

HCD-EP707 is the amplifier, CD player, tape deck and tuner section in CMT-EP707.

CD Section	Model Name Using Similar Mechanism	NEW
	CD Mechanism Type	CMCJ-0132
TAPE Section	Model Name Using Similar Mechanism	HCD-EP505
	Tape Transport Mechanism Type	CRL4349

SPECIFICATIONS

AUDIO POWER SPECIFICATIONS:
(U.S.A. model only)
POWER OUTPUT AND TOTAL HARMONIC DISTORTION:

with 4 Ω loads both channels driven, from 120 - 10,000 Hz; rates 15 W per channel minimum RMS power, with no more than 10% total harmonic distortion from 250 mW to rated output.

Amplifier section
Canadian model:
Continuous RMS power output (reference)
15 + 15 W
(4 Ω at 1 kHz, 10% THD)

European model:
DIN power output (rated) 12 + 12 W
(4 Ω at 1 kHz, DIN)
Continuous RMS power output (reference)
15 + 15 W
(4 Ω at 1 kHz, 10% THD)
Music power output (reference)
38 + 38 W

Other model:
The following measured at AC 230 V or AC 120 V, 50/60 Hz
DIN power output (rated) 12 + 12 W
(4 Ω at 1 kHz, DIN)
Continuous RMS power output (reference)
15 + 15 W
(4 Ω at 1 kHz, 10% THD)
Inputs
MD IN (phono jacks): voltage 450 mV, impedance 47 kilohms
Outputs
PHONES: (stereo mini jack) Accepts headphones of 8 Ω or more
SPEAKER: Accepts impedance of 8 to 16 Ω

CD player section
System: Compact disc and digital audio system
Laser: Semiconductor laser (λ=780 nm)
Emission duration: continuous
Frequency response: 20 Hz - 20 kHz (±0.5 dB)
OPTICAL DIGITAL OUT
(Square optical connector jack, rear panel)
Wavelength: 660 nm

Tape player section
Recording system: 4-track 2-channel stereo
Frequency response: 50 - 13 000 Hz (±3 dB), using Sony TYPE I cassette

Tuner section
FM stereo, FM/AM superheterodyne tuner

FM tuner section
Tuning range: 87.5 - 108.0 MHz
Antenna: FM lead antenna
Antenna terminal (Except for European model): 75 Ω coaxial
Intermediate frequency: 10.7 MHz

AM tuner section
Tuning range
Pan-American model: 530 - 1 710 kHz (with the interval set at 10 kHz)
531 - 1 710 kHz (with the interval set at 9 kHz)
European model: 531 -1 602 kHz (with the interval set at 9 kHz)
Other models: 531 - 1 602 kHz (with the interval set at 9 kHz)
530 - 1 710 kHz (with the interval set at 10 kHz)
Antenna: AM loop antenna
Intermediate frequency: 450 kHz

General
Power requirements
North American model : 120 V AC, 60 Hz
Other models: 230 V AC, 50/60 Hz

Power consumption
European model: 38 W
0.5 W (in the standby mode)
Other models: 38 W

Dimensions (w/h/d): Approx. 180 × 246 × 335 mm

Mass: Approx. 5.0 kg

Supplied accessories: AM loop antenna (1)
Remote Commander (1)
Batteries (2)
FM lead antenna (1) (Except for European model)

Design and specifications are subject to change without notice.

COMPACT DISC DECK RECEIVER

9-874-043-08
2004B05-1
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Sony Corporation
Home Audio Company
Published by Sony Engineering Corporation

SONY®

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270 ˚C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

This appliance is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT MARKING is located on the bottom.

CAUTION
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety check before releasing the set to the customer:
Check the antenna terminals, metal trim, “metallized” knobs, screws, and all other exposed metal parts for AC leakage.
Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes.). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers’ instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The “limit” indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)

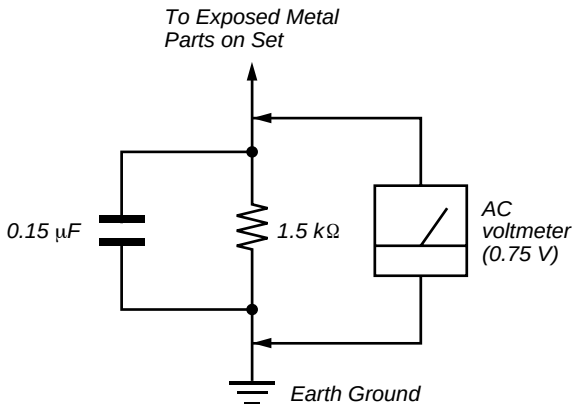

Fig. A. Using an AC voltmeter to check AC leakage.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

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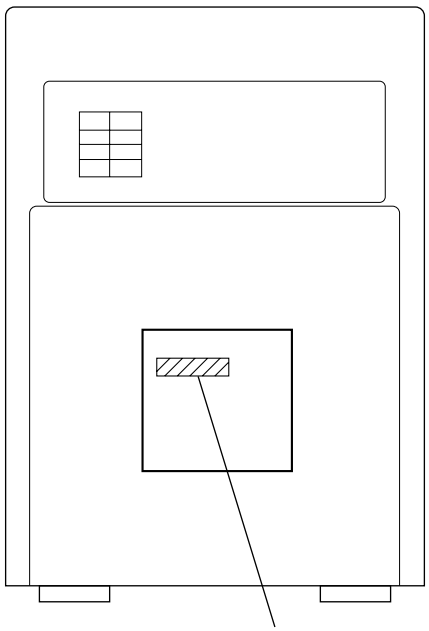
NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

• MODEL IDENTIFICATION
– Rear View –



Power Voltage Indication

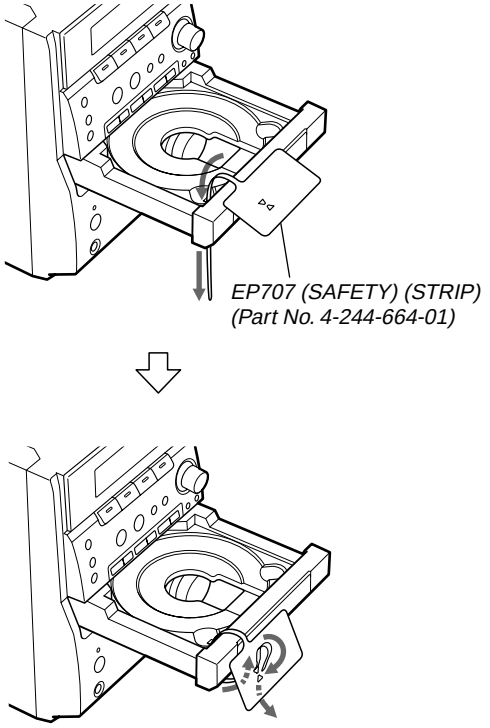
Model	Power Voltage Indication
US and Canadian models	AC: 120 V 60 Hz 38 W
Other models	AC: 230 V ∿ 50/60 Hz 38 W

NOTE FOR TRANSPORTING A SET

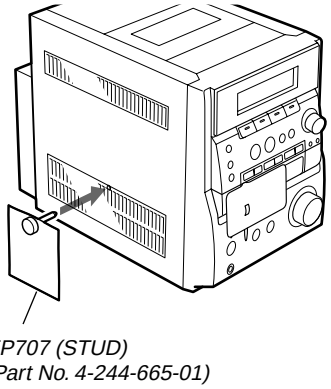
After repair is completed, be sure to attach EP707 (SAFETY) (STRIP) (Part No. 4-244-664-01) and EP707 (STUD) (Part No. 4-244-665-01) on the set with following procedure before you transport a set.

1 Re-tie the strip on the disc tray as shown (see Fig. A).
2 Press I/⏻ to close the disc tray.
The system turns off. Do not press DISC 1 - 3 or ⏏ to close the disc tray.
3 Reinsert the tagged pin (see Fig. B).

A



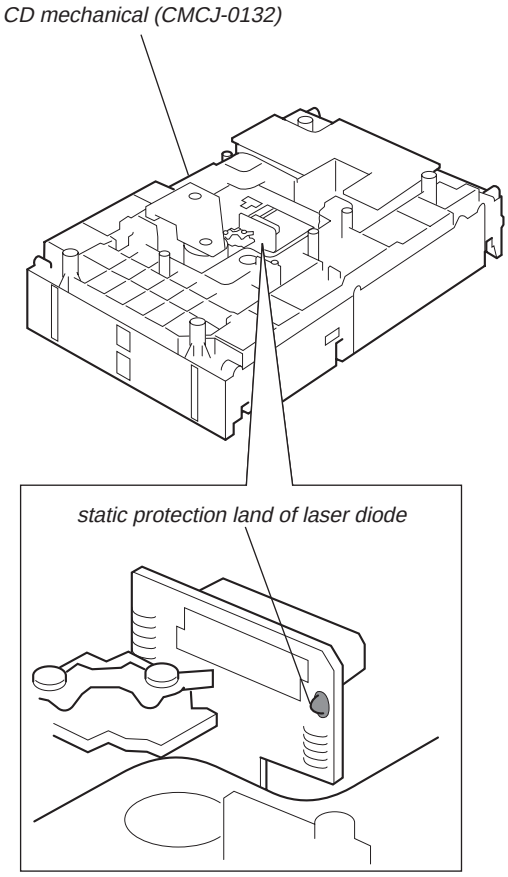
B



NOTE FOR EXCHANGING A CD MECHANICAL (CMCJ-0132)

Set the static protection land of laser diode of the new CD mechanical (CMCJ-0132) to open before attaching in a set, when carrying out repair exchange of the CD mechanical (CMCJ-0132). (Part No. 1-796-542-11 MECHANICAL, CD (CMCJ-0132))

– Bottom View –



SECTION 2
GENERAL

This section is extracted from instruction manual.

LOCATION OF CONTROLS
– Front Panel –

Main unit

ALPHABETICAL ORDER

A – M

Cassette compartment 5
CD 3
DISC 1/DISC 2/DISC 3 14
Disc tray 15
DISC SKIP 3
DISPLAY 22
Display Window 4
ENTER 1
FM MODE/DIR 21
MD 7
MEGA BASS 18
MUSIC MENU 17

P – Z

PGM CLEAR 8
PHONES jack 19
PLAY MODE 21
PRESET +/– 13
Remote sensor 23
TAPE 2
TUNER 6
TUNER MEM 10
TUNING +/– 12
VOLUME control 16

BUTTON DESCRIPTIONS

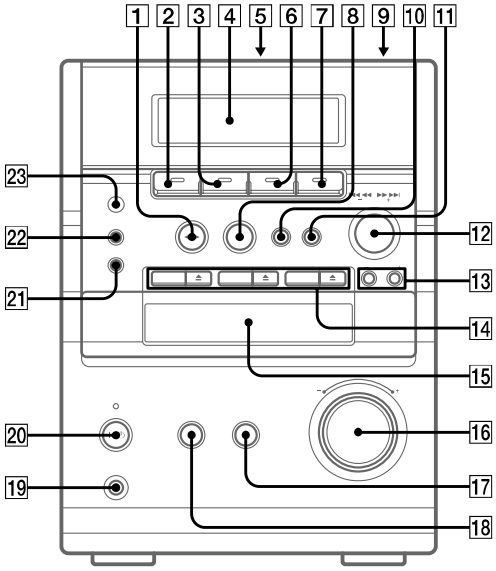
I/⏻ (power) 20

CD

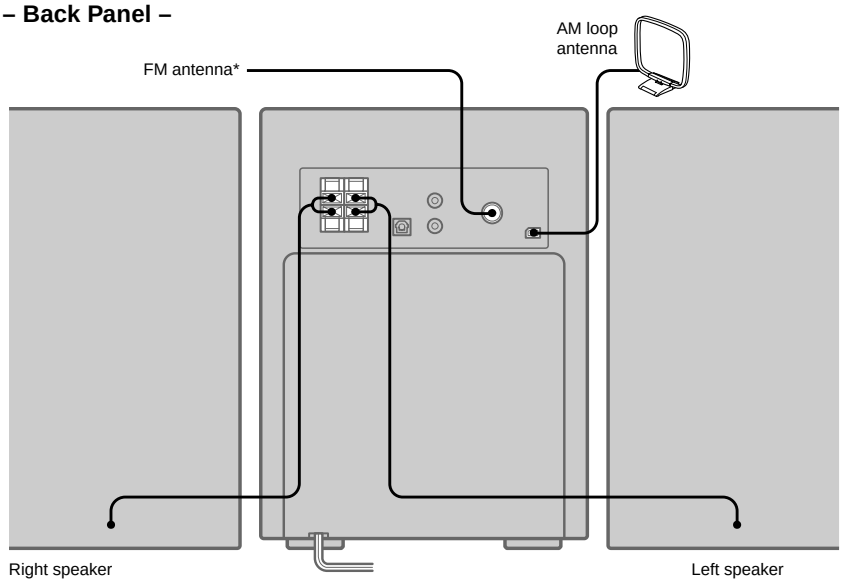
⏮ ◀◀ (go back) 12
▶▶ ⏭ (go forward) 12
◀▶ (play) 1
❚❚ (pause) 10
⏏ (eject) 14
■ (stop) 8

TAPE

▶▶ ⏭ (fast forward) 12
❚❚ (pause) 10
◀▶ (play) 1
● REC PAUSE/START 11
⏮ ◀◀ (rewind) 12
⏏ PUSH OPEN/CLOSE 9
■ (stop) 8



– Back Panel –



* Except for European model

Remote control

ALPHABETICAL ORDER

A – M

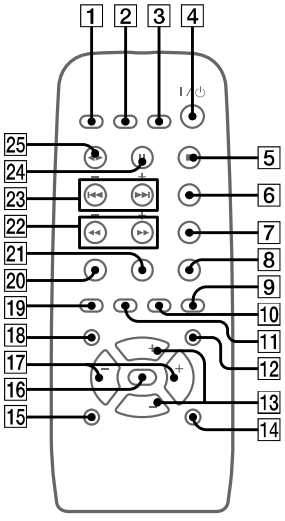
CD 11
CLOCK/TIMER ON/OFF 2
CLOCK/TIMER SET 3
DISC SKIP 7
DISPLAY 6
ENTER 15
FM MODE 8
MD 9
MEGA BASS 14
MUSIC MENU +/– 17
MUTING 16

P – Z

PGM CLEAR 12
PLAY MODE 20
PRESET/CLOCK/TIMER +/– 23
REPEAT/DIR 21
SLEEP 1
TAPE 19
TUNER/BAND 10
TUNER MEMORY 18
TUNING +/– 22
VOL (volume) +/– 13

BUTTON DESCRIPTIONS

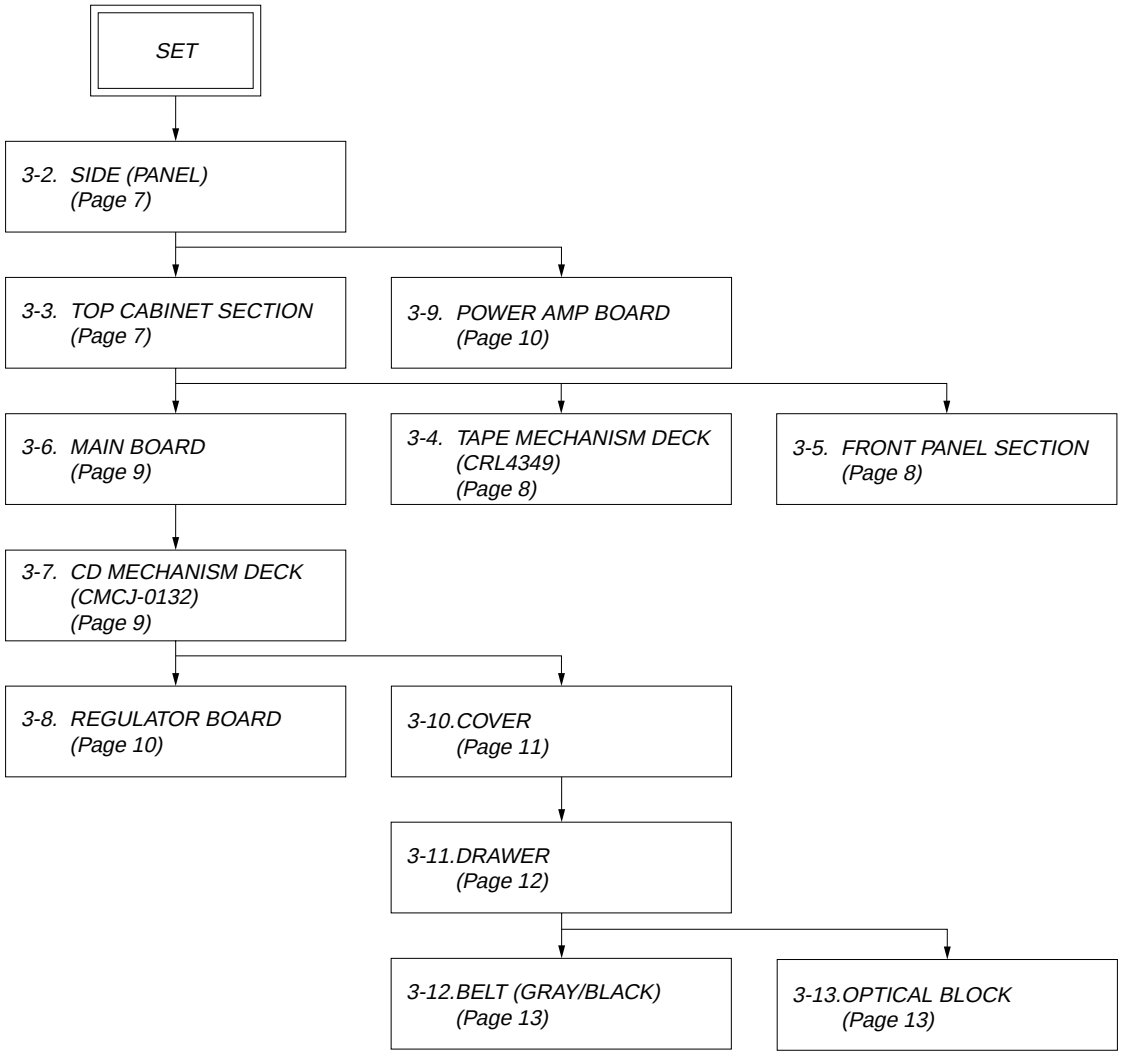
I/⏻ (power) 4
◀◀ (rewind) ▶▶ (fast forward) 22
⏮ (go back) ⏭ (go forward) 23
❚❚ (pause) 24
◀▶ (play) 25
■ (stop) 5



SECTION 3
DISASSEMBLY

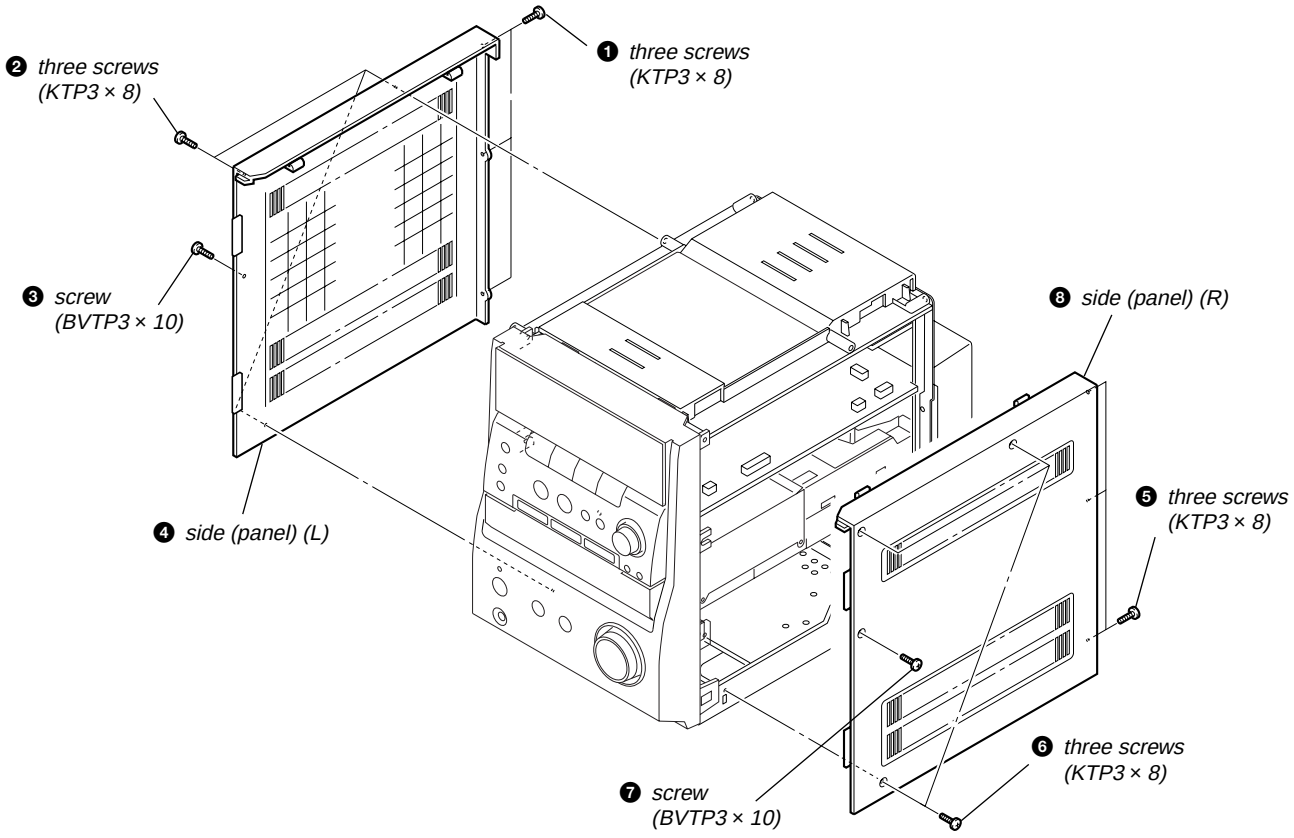
• This set can be disassembled in the order shown below.

3-1. DISASSEMBLY FLOW

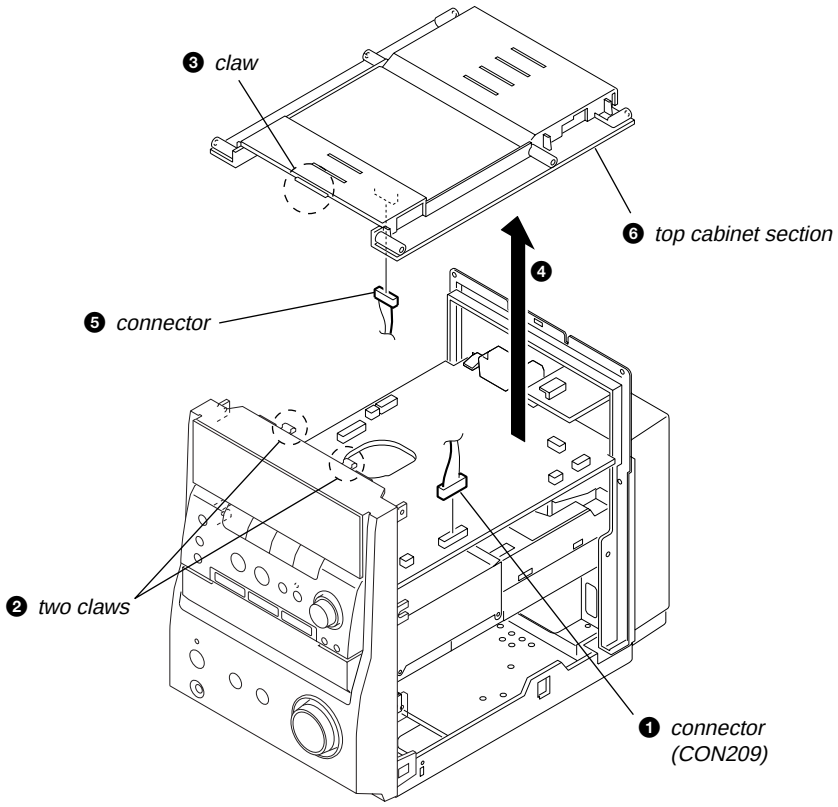


Note: Follow the disassembly procedure in the numerical order given.

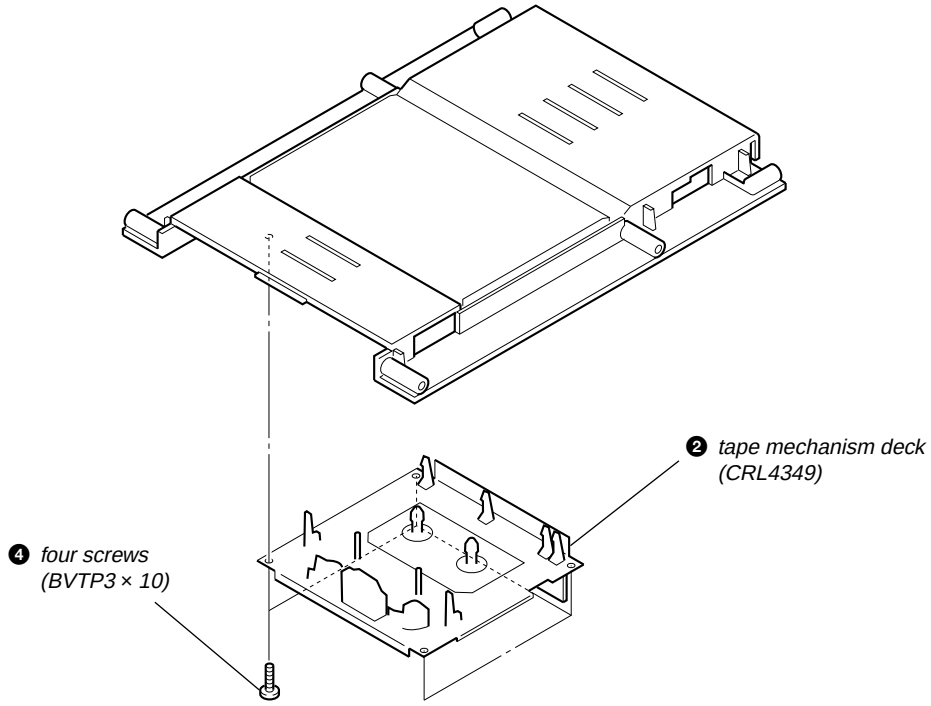
3-2. SIDE (PANEL)


❷ three screws (KTP3 × 8)
❶ three screws (KTP3 × 8)
❸ screw (BVTP3 × 10)
❽ side (panel) (R)
❹ side (panel) (L)
❺ three screws (KTP3 × 8)
❻ three screws (KTP3 × 8)
❼ screw (BVTP3 × 10)

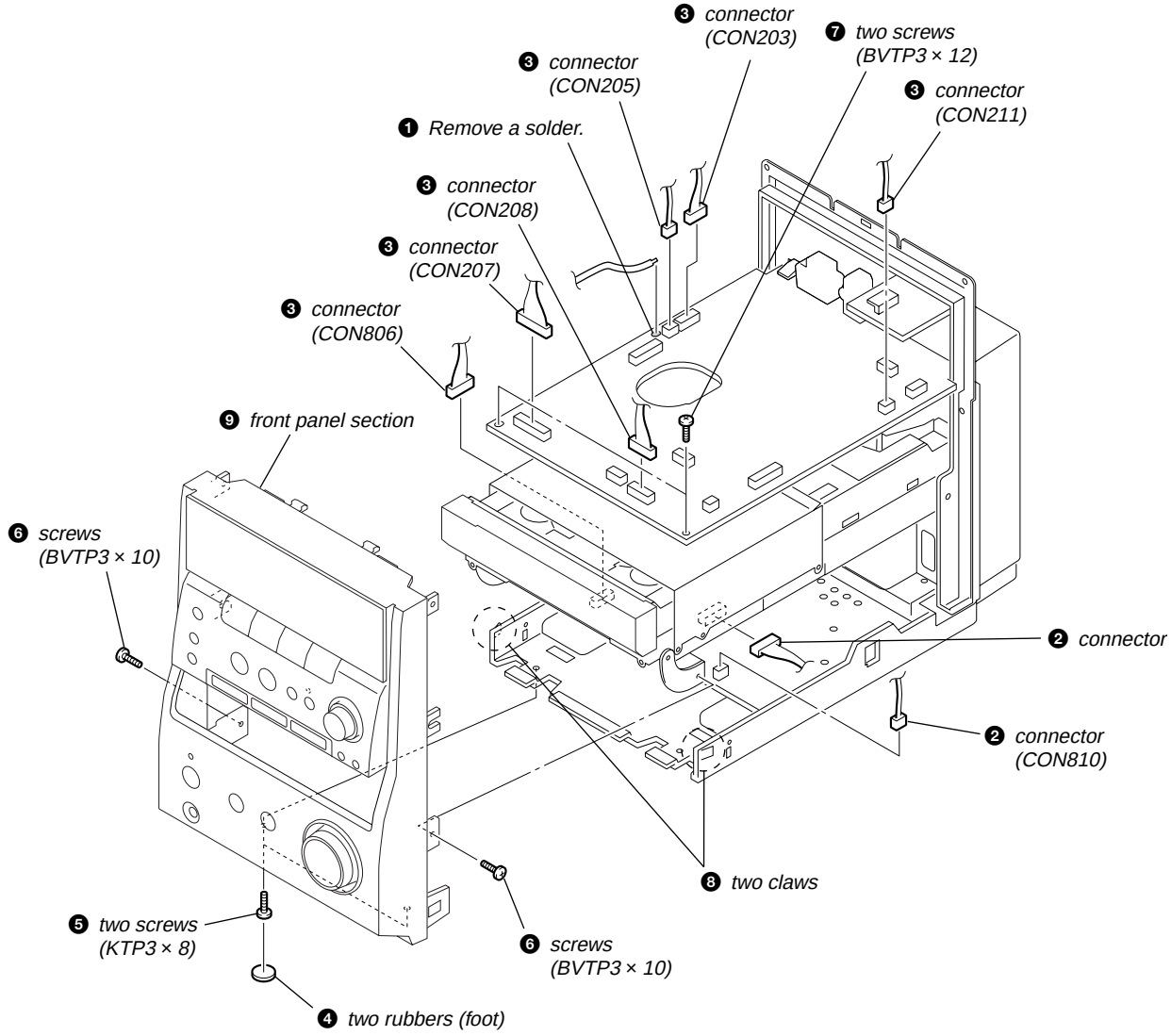
3-3. TOP CABINET SECTION



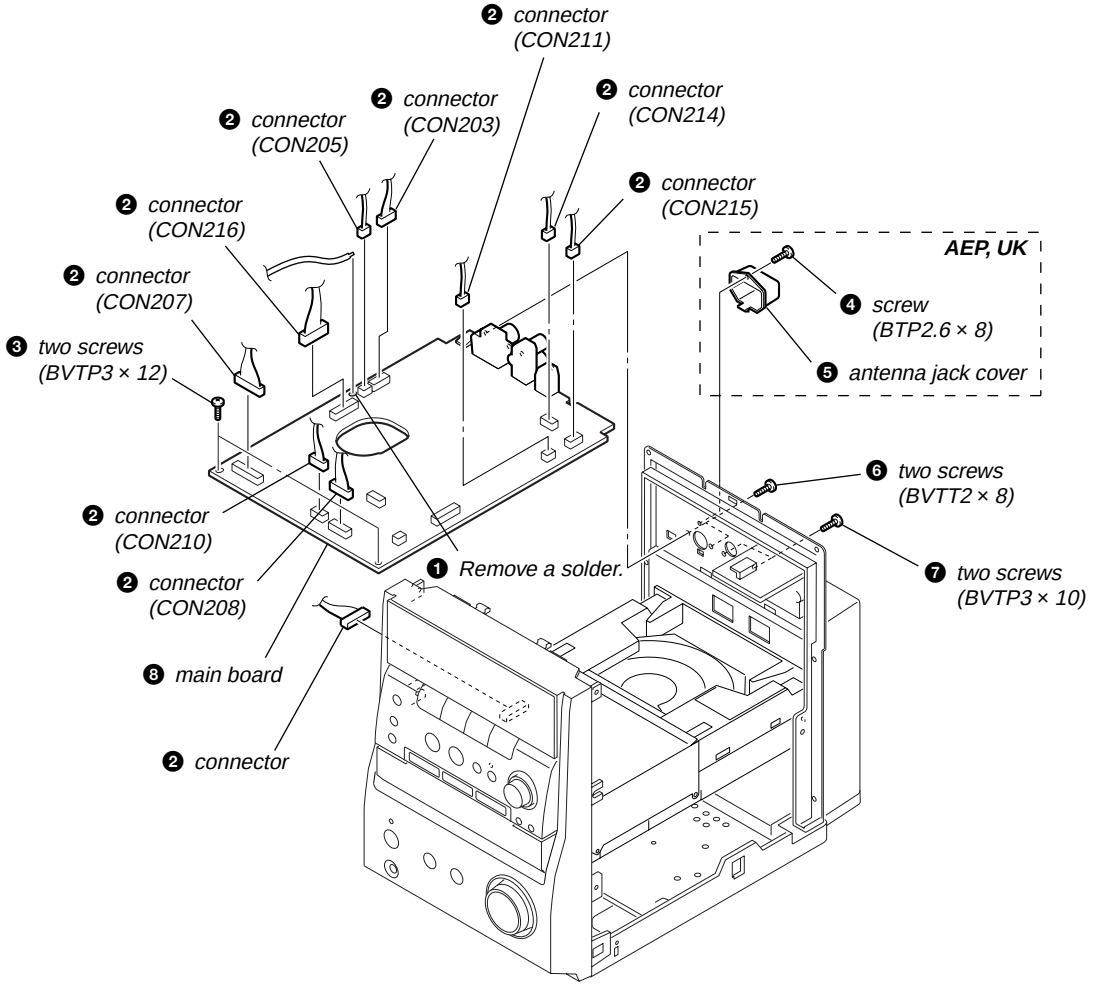
3-4. TAPE MECHANISM DECK (CRL4349)



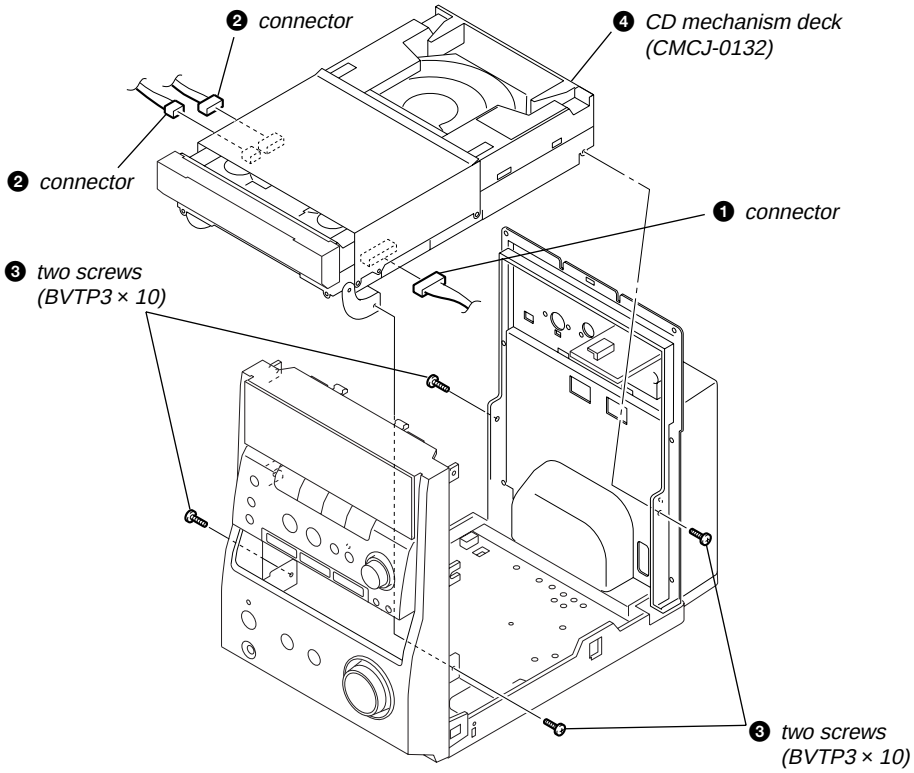
3-5. FRONT PANEL SECTION



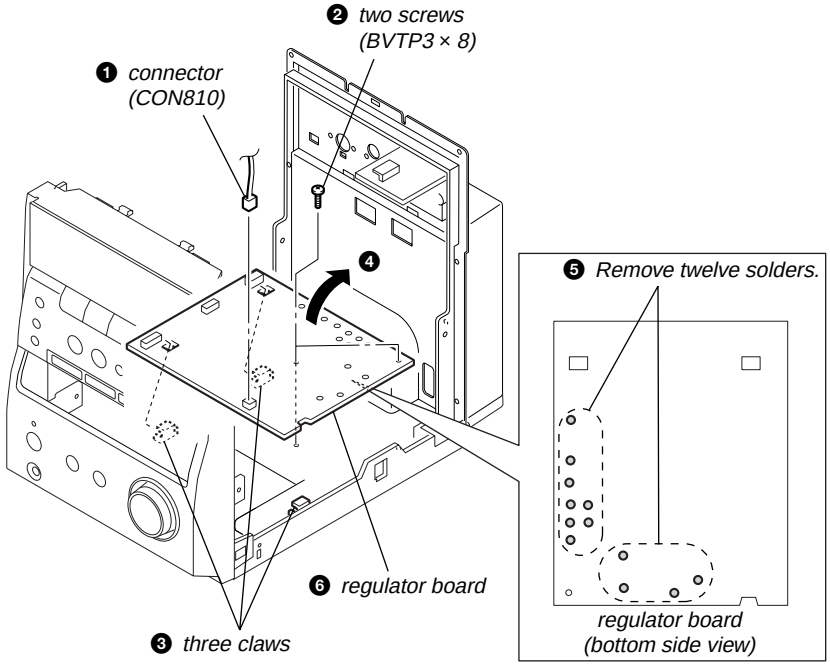
3-6. MAIN BOARD



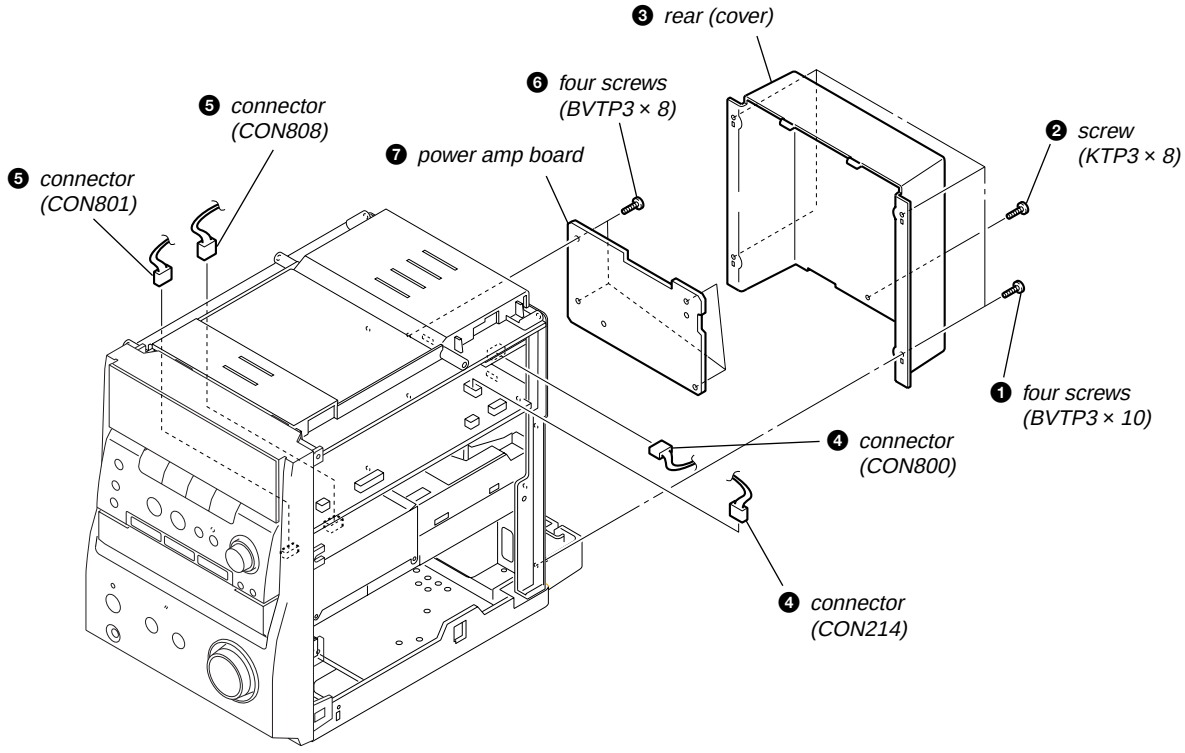
3-7. CD MECHANISM DECK (CMCJ-0132)



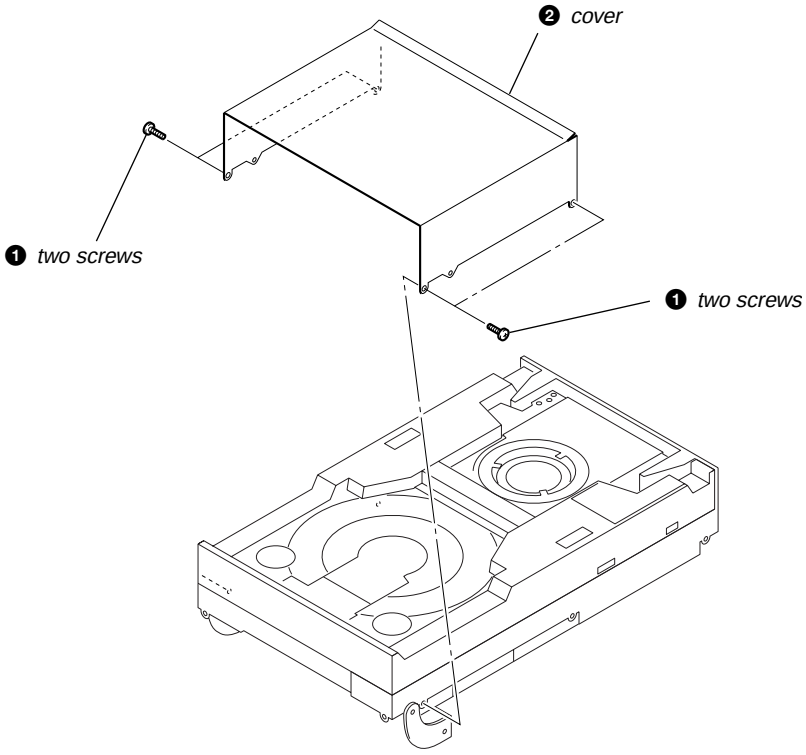
3-8. REGULATOR BOARD



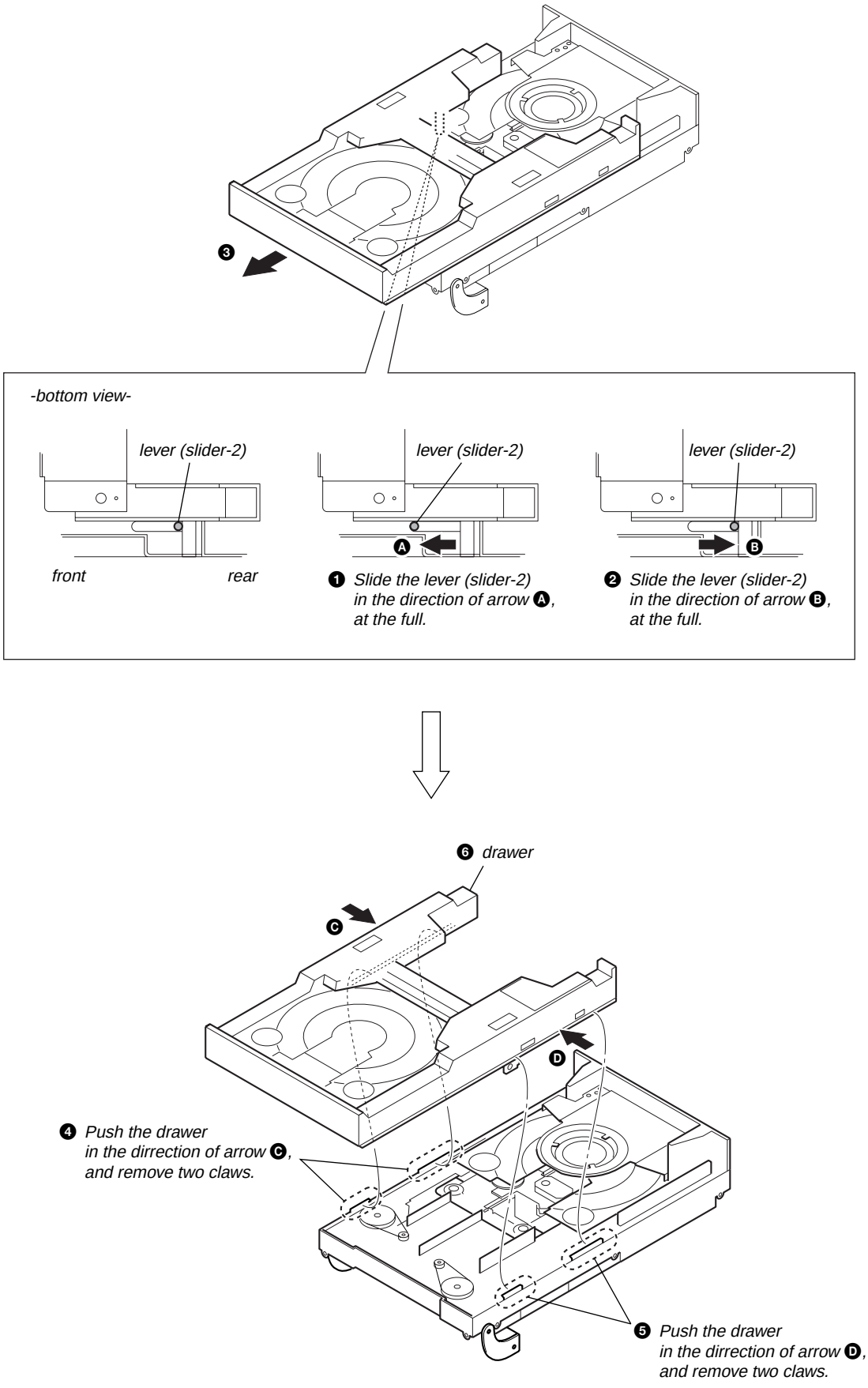
3-9. POWER AMP BOARD



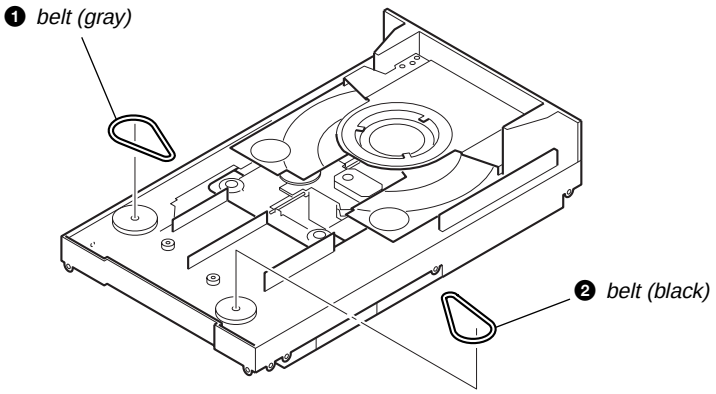
3-10. COVER



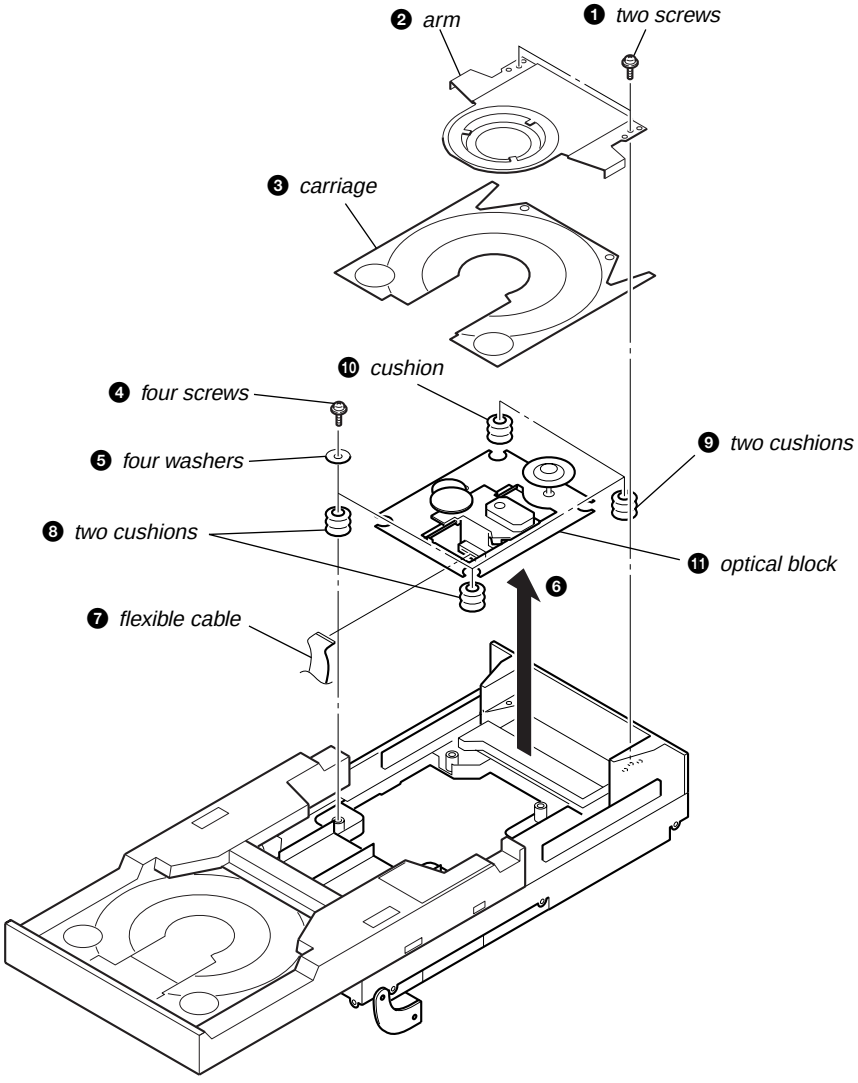
3-11. DRAWER


❸
-bottom view-
lever (slider-2)
lever (slider-2)
lever (slider-2)
front
rear
Ⓐ
Ⓑ
❶ Slide the lever (slider-2) in the direction of arrow Ⓐ, at the full.
❷ Slide the lever (slider-2) in the direction of arrow Ⓑ, at the full.
❻ drawer
Ⓒ
Ⓓ
❹ Push the drawer in the dirrection of arrow Ⓒ, and remove two claws.
❺ Push the drawer in the dirrection of arrow Ⓓ, and remove two claws.

3-12. BELT (GRAY/BLACK)



3-13. OPTICAL BLOCK



SECTION 4
ELECTRICAL ADJUSTMENTS

PRECAUTION

1. Setting
   MEGA BASS switch : OFF

TAPE DECK SECTION

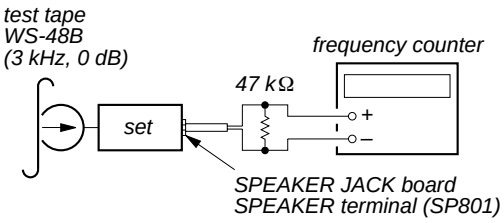
0 dB=0.775 V

Test tape

Type	Signal	Used for
WS-48B	3 kHz, 0 dB	Tape Speed Adjustment

Tape Speed Adjustment

Setting:
Function: TAPE



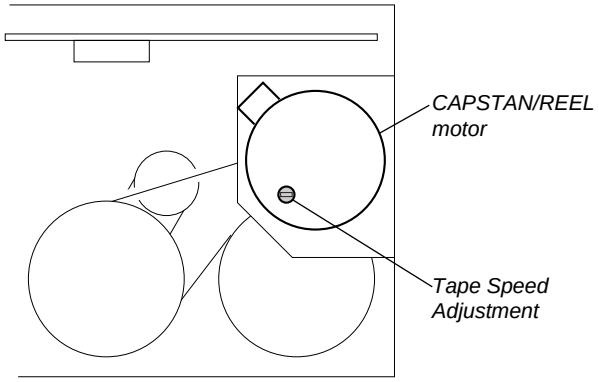
Procedure:

1. Playback WS-48B (tape center) in the FWD state.
2. Adjsut the volume in CAPSTAN/REEL motor so that the frequency counter reading becomes 3,000 Hz.

Specified Value: 2,910 to 3,090 Hz

3. Confirm that the frequency at the beginning and that at the end of tape winding are between 2,955 to 3,045 Hz.

Adjustment Location:



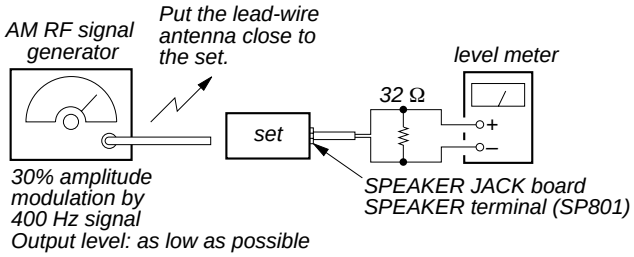
Sample Value of Wow and Flutter: 0.3% or less W. RMS (JIS)
(WS-48B)

TUNER SECTION

0 dB=1 μV

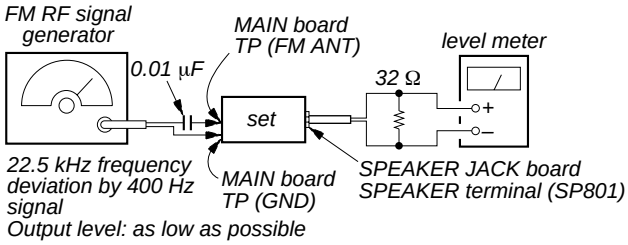
[AM]

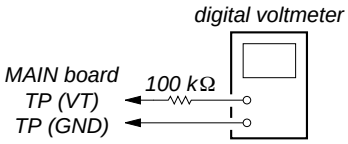
Setting:
Function: TUNER
TUNER/BAND switch: AM



[FM]

Setting:
Function: TUNER
TUNER/BAND switch: FM





- Repeat the procedures in each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by the trimmer capacitors.

( ): AEP, UK models

AM IF ADJUSTMENT	
Adjust for a maximum reading on level meter	
IFT205	450 kHz

AM FREQUENCY COVERAGE ADJUSTMENT		
Adjustment Part	Frequency Display	Reading on Digital Voltmeter
IFT201	530 kHz (531 kHz)	1.3 ± 0.1 V
Confirmation	1,710 kHz (1,602 kHz)	7.8 ± 0.5 V (7.1 ± 0.5 V)

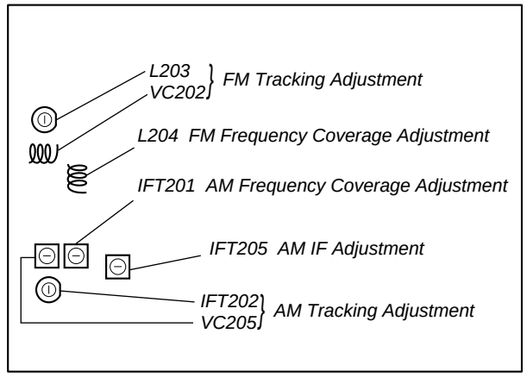
AM TRACKING ADJUSTMENT	
Adjust for a maximum reading on level meter	
IFT202	603 kHz
VC205	1,404 kHz

FM FREQUENCY COVERAGE CONFIRMATION		
Adjustment Part	Frequency Display	Reading on Digital Voltmeter
L204	87.5 MHz	2.3 to 2.5 V (1.4 to 1.6 V)
Confirmation	108 MHz	6.3 to 7.3 V (7.3 to 8.5 V)

FM TRACKING ADJUSTMENT	
Adjust for a maximum reading on level meter	
L203	90.1 MHz
VC202	106.1 MHz

Adjustment Location and Connecting Points

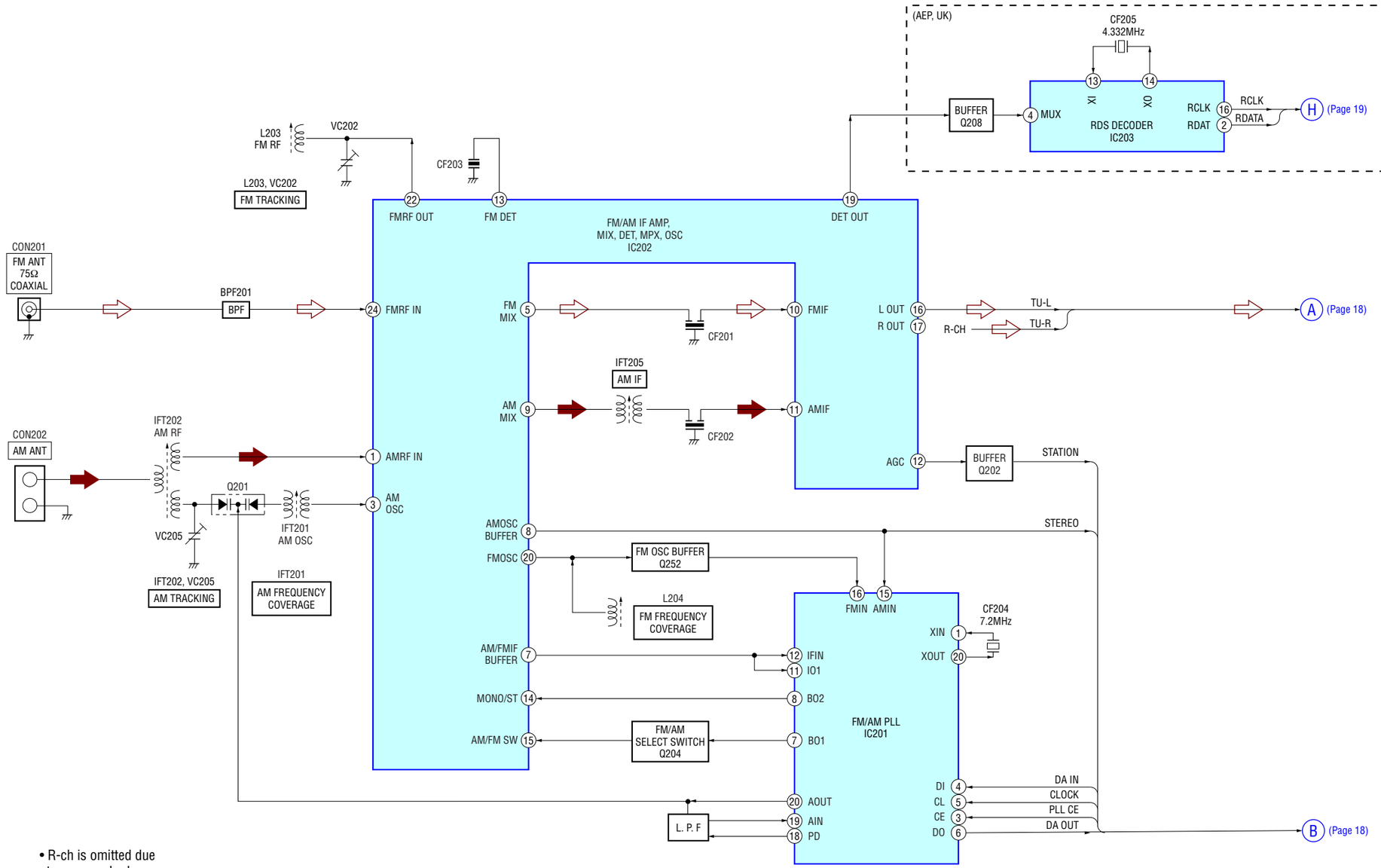
– MAIN BOARD (Component Side) –



– MAIN BOARD (Conductor Side) –

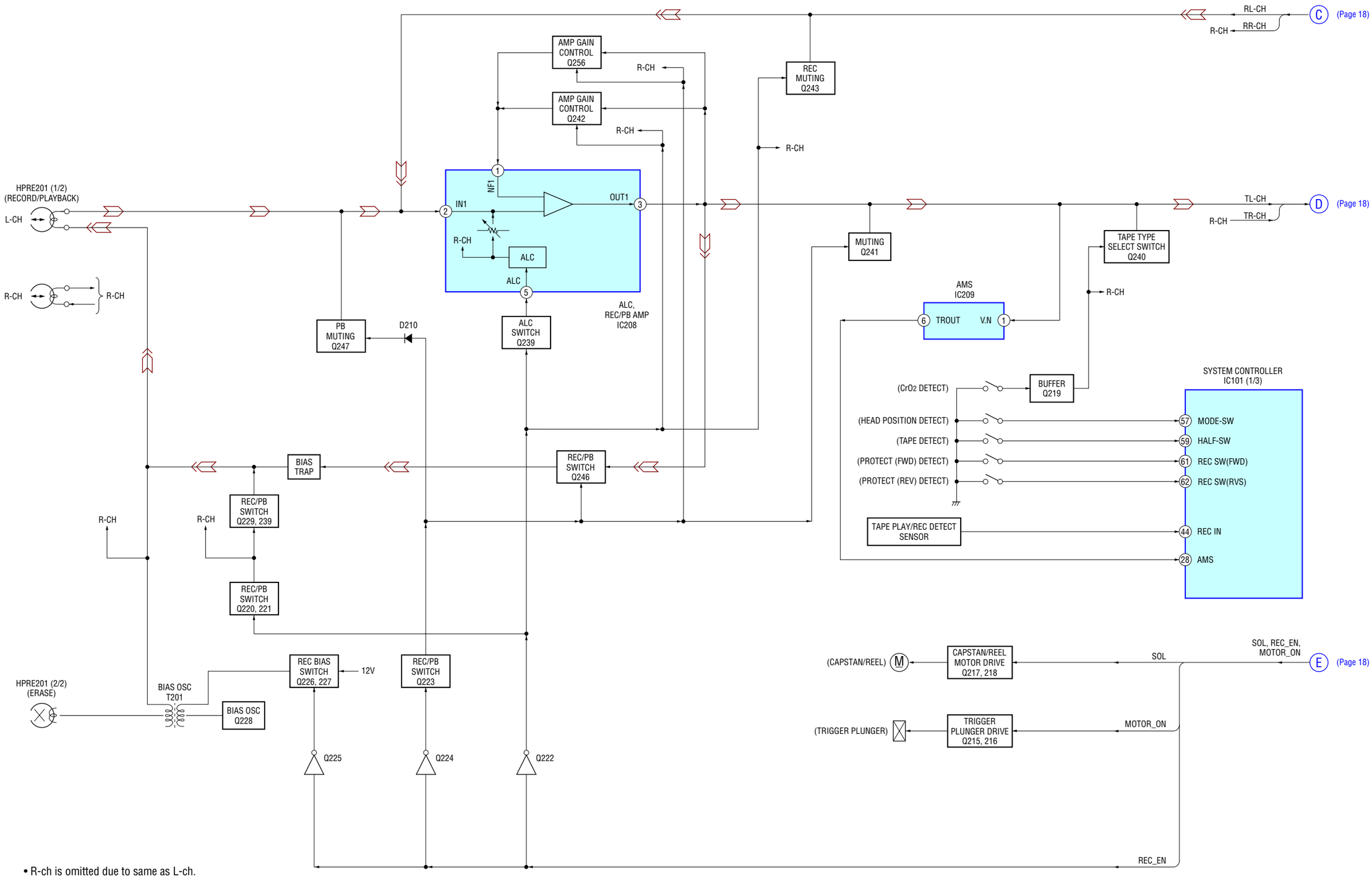
SECTION 5
DIAGRAMS

5-1. BLOCK DIAGRAM – TUNER Section –



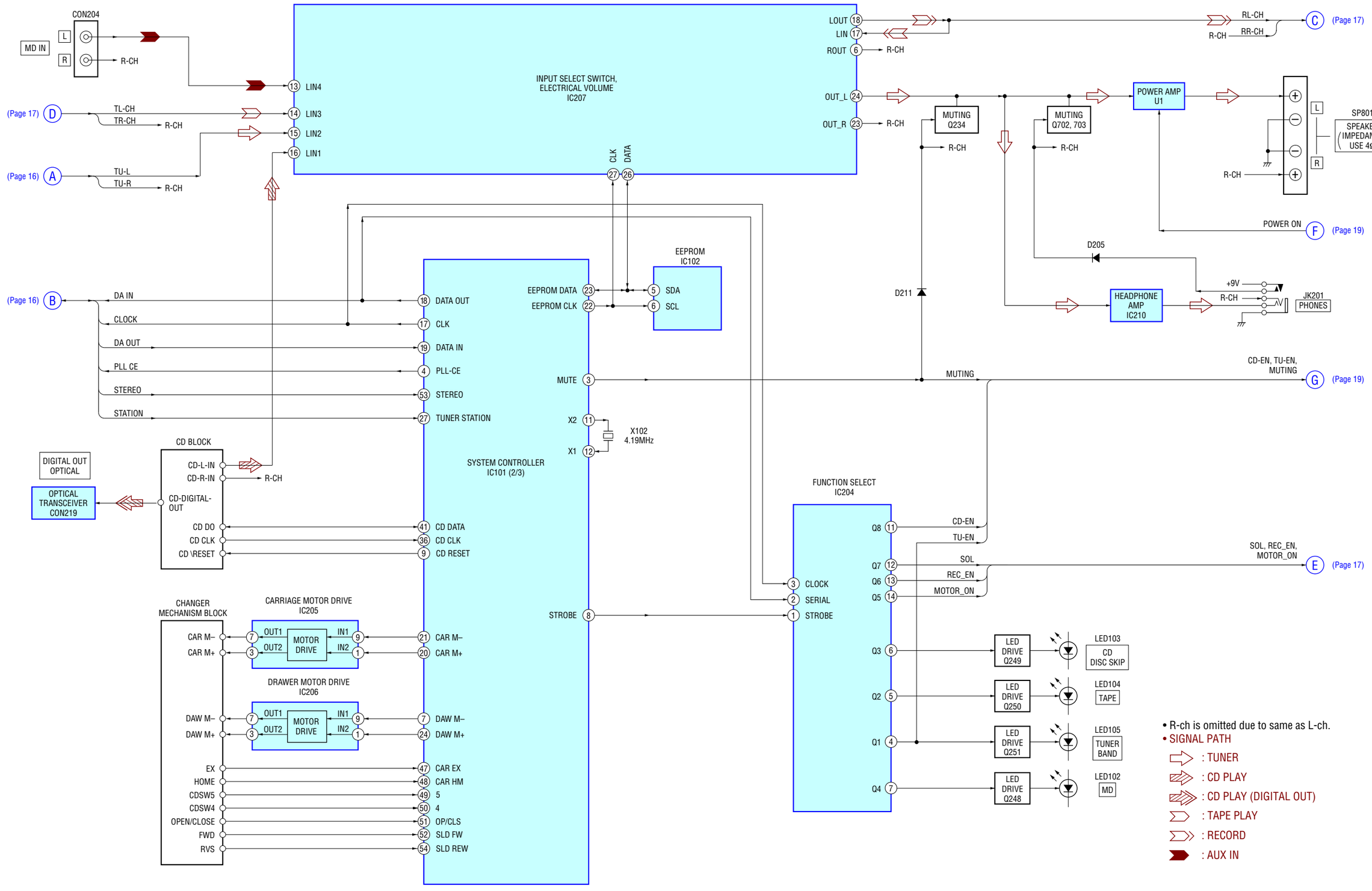
- R-ch is omitted due to same as L-ch.
- SIGNAL PATH
  - ⇨ : FM
  - ➡ : AM

5-2. BLOCK DIAGRAM – TAPE DECK Section –



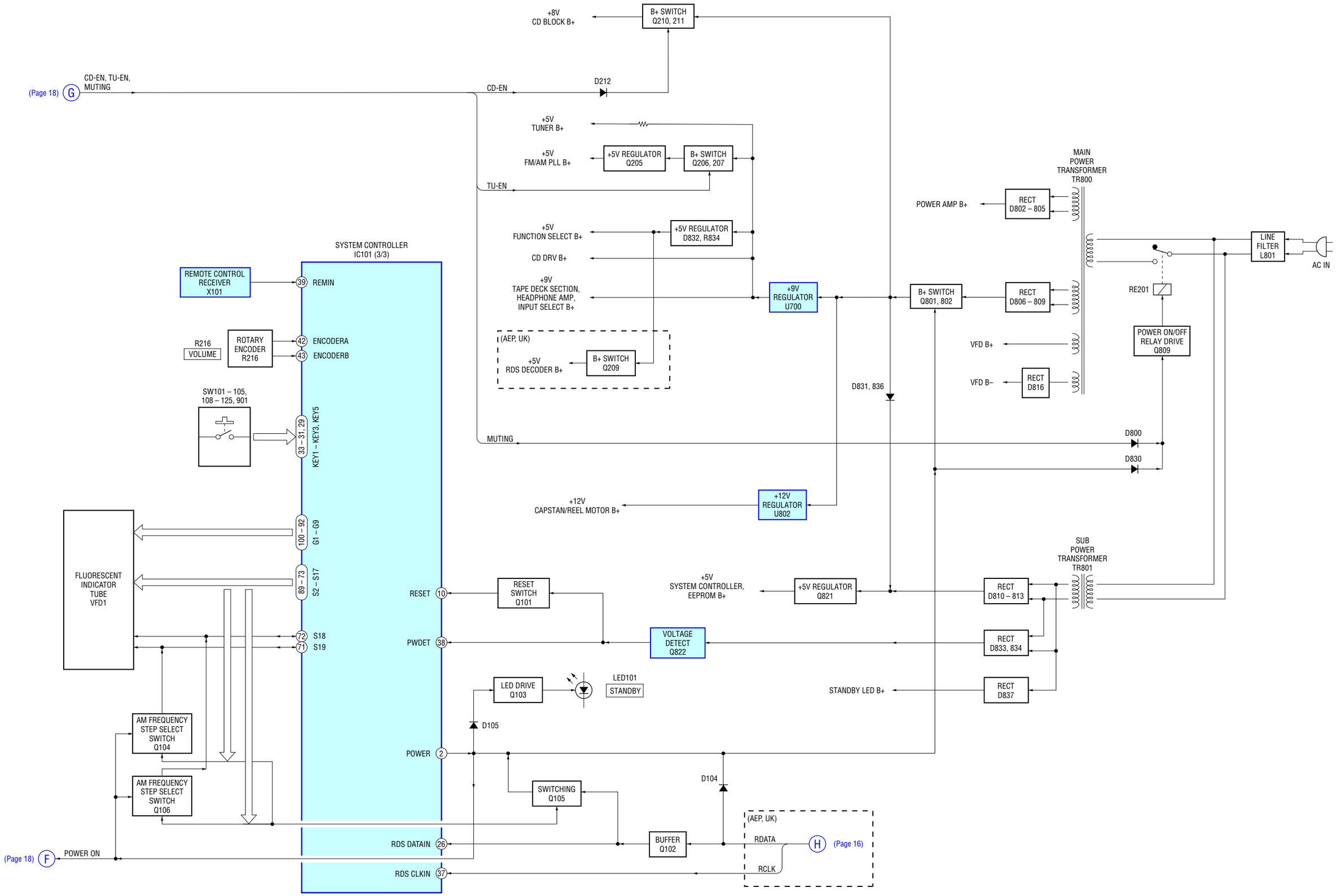
• R-ch is omitted due to same as L-ch.
• SIGNAL PATH
: TAPE PLAY
: RECORD

5-3. BLOCK DIAGRAM – MAIN Section –



- R-ch is omitted due to same as L-ch.
- SIGNAL PATH
  - : TUNER
  - : CD PLAY
  - : CD PLAY (DIGITAL OUT)
  - : TAPE PLAY
  - : RECORD
  - : AUX IN

5-4. BLOCK DIAGRAM – DISPLAY/POWER SUPPLY Section –



5-5. NOTE FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

Note on Printed Wiring Boards:

- ○——— : parts extracted from the component side.
- ——— : parts extracted from the conductor side.
- : indicates side identified with part number.
- : Pattern from the side which enables seeing.

(The other layers' patterns are not indicated.)

Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- : nonflammable resistor.
- : panel designation.

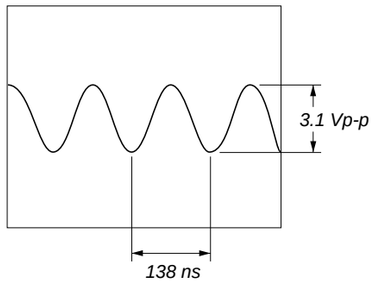
Note:	**Note:**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- : B+ Line.
- : B– Line.
- : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
  ( ) : AM
  [ ] : CD PLAY
  < > : TAPE PLAY
  { } : REC
  * : Impossible to measure
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  : FM
  : AM
  : CD PLAY
  : CD PLAY (DEGITAL OUT)
  : TAPE PLAY
  : REC
  : AUX IN
- Abbreviation
  AUS : Australian model
  CND : Canadian model

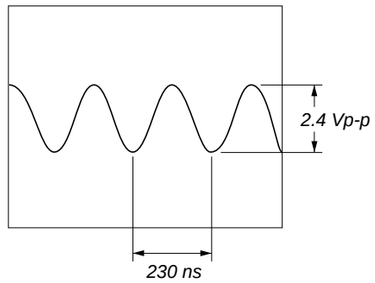
• Waveforms

– MAIN Board –

❶ IC201 ㉒ XOUT (TUNER mode)

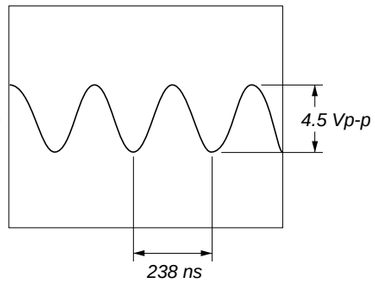


❸ IC203 ⑭ XO

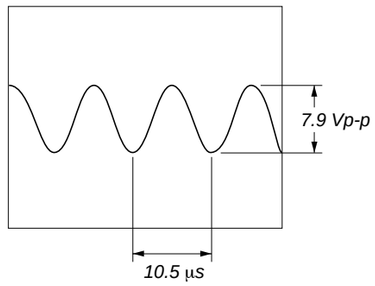


– DISPLAY Board –

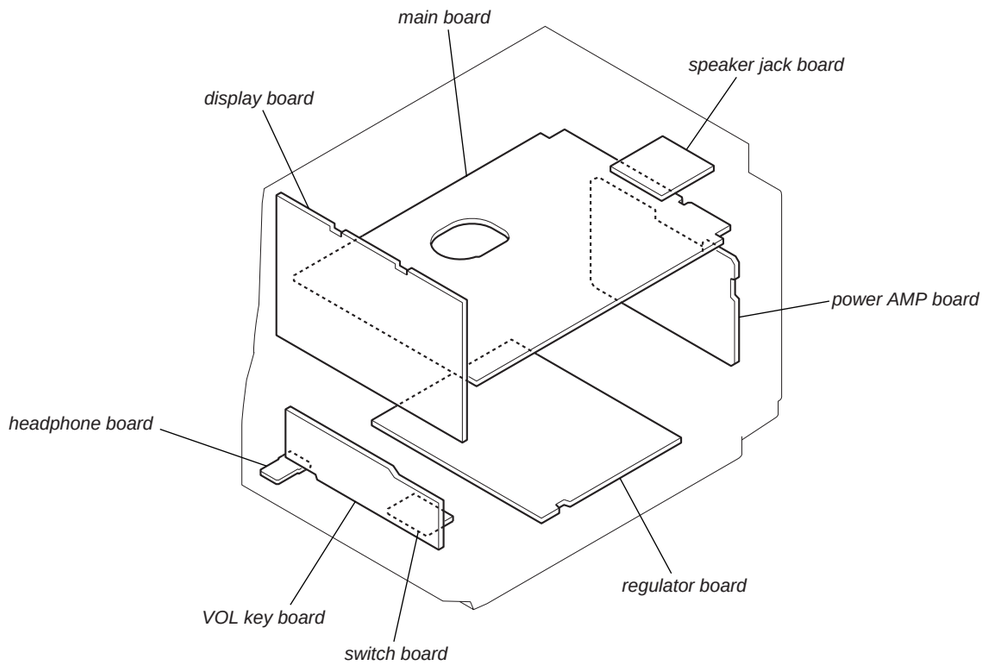
⓫ IC101 ⑪ X2



❷ Q228 (Collector) (REC mode)

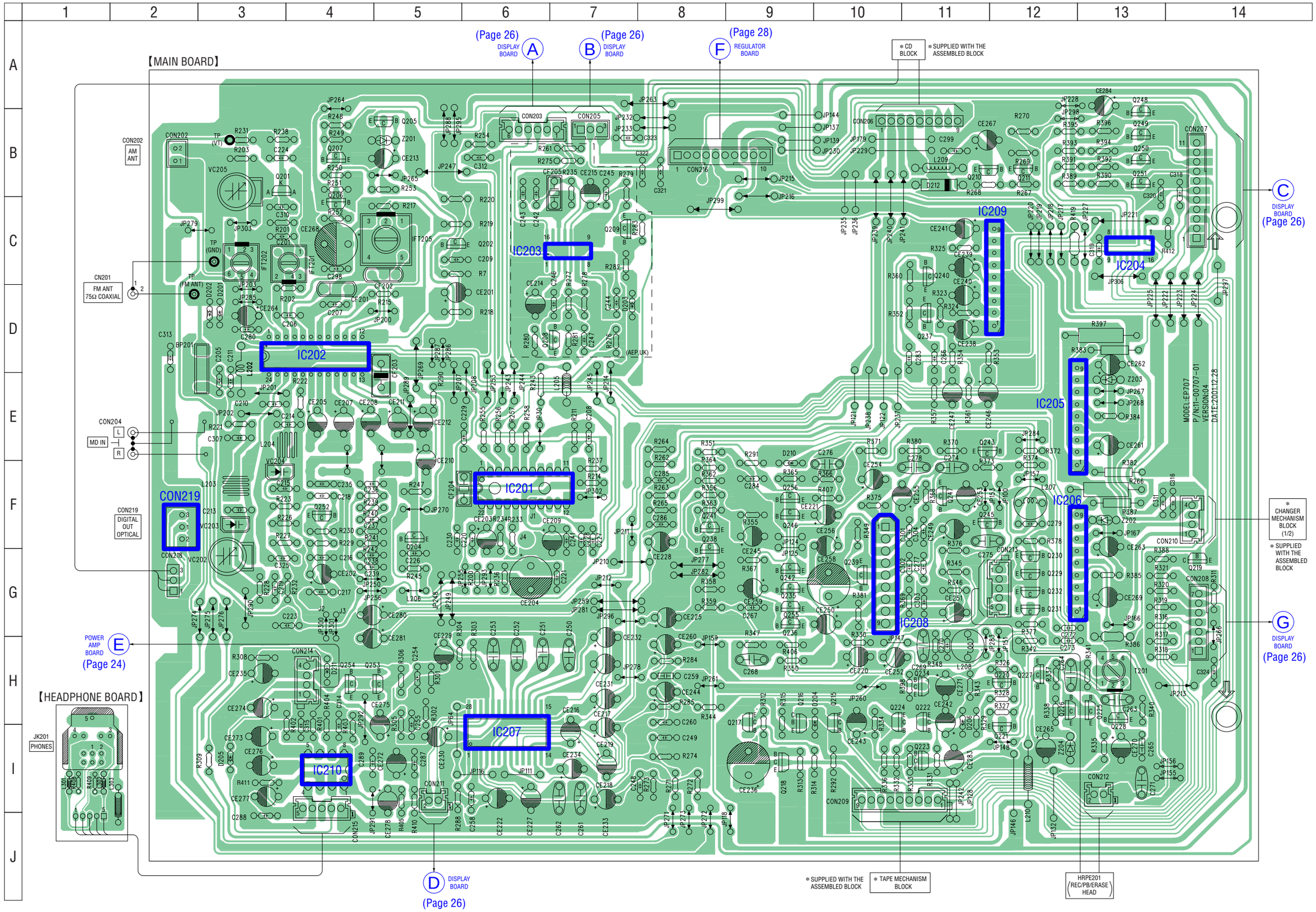


• Circuit Boards Location



5-6. PRINTED WIRING BOARDS – MAIN Section –

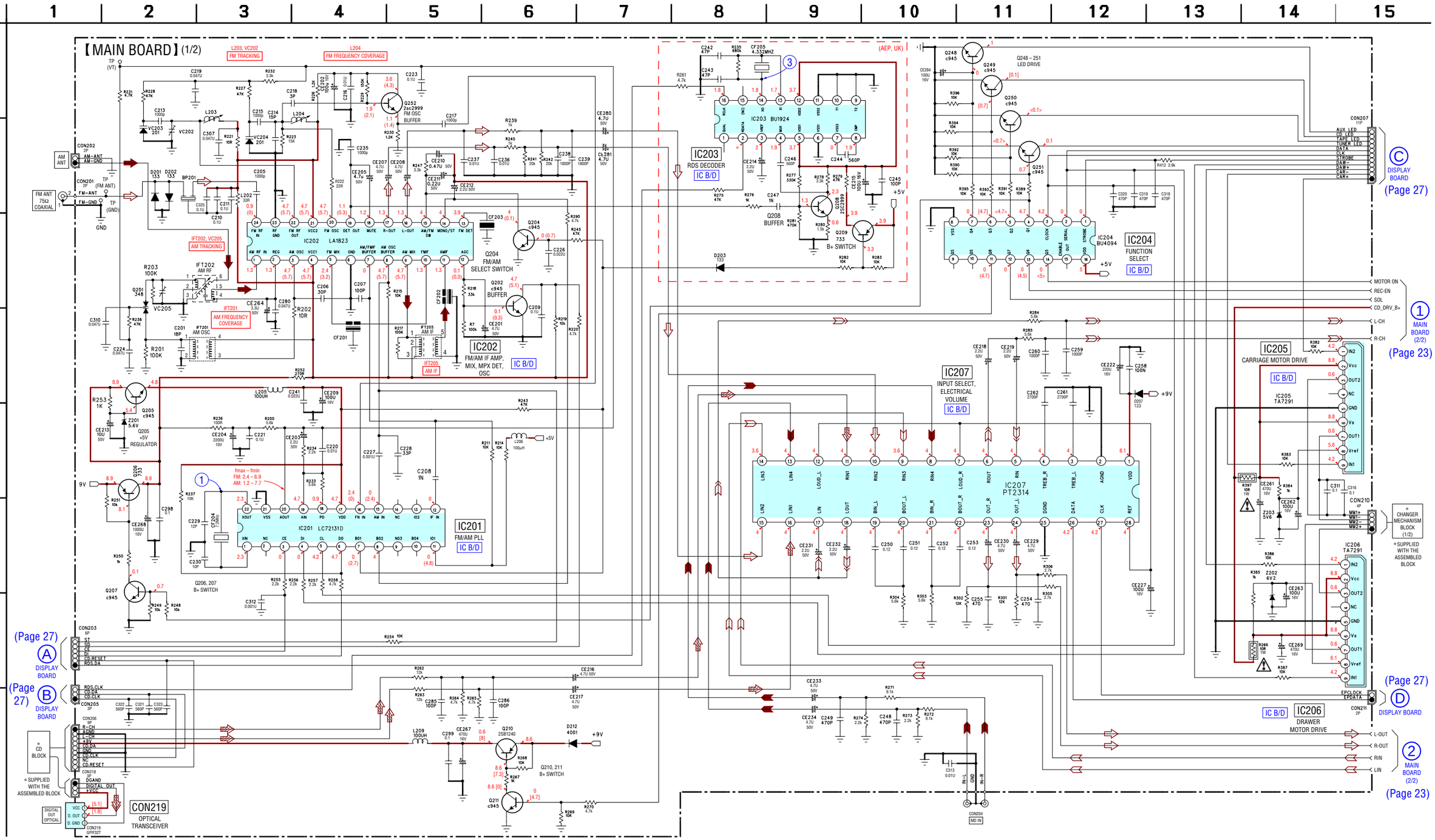
• See page 20 for Circuit Boards Location.



- **Semiconductor Location**

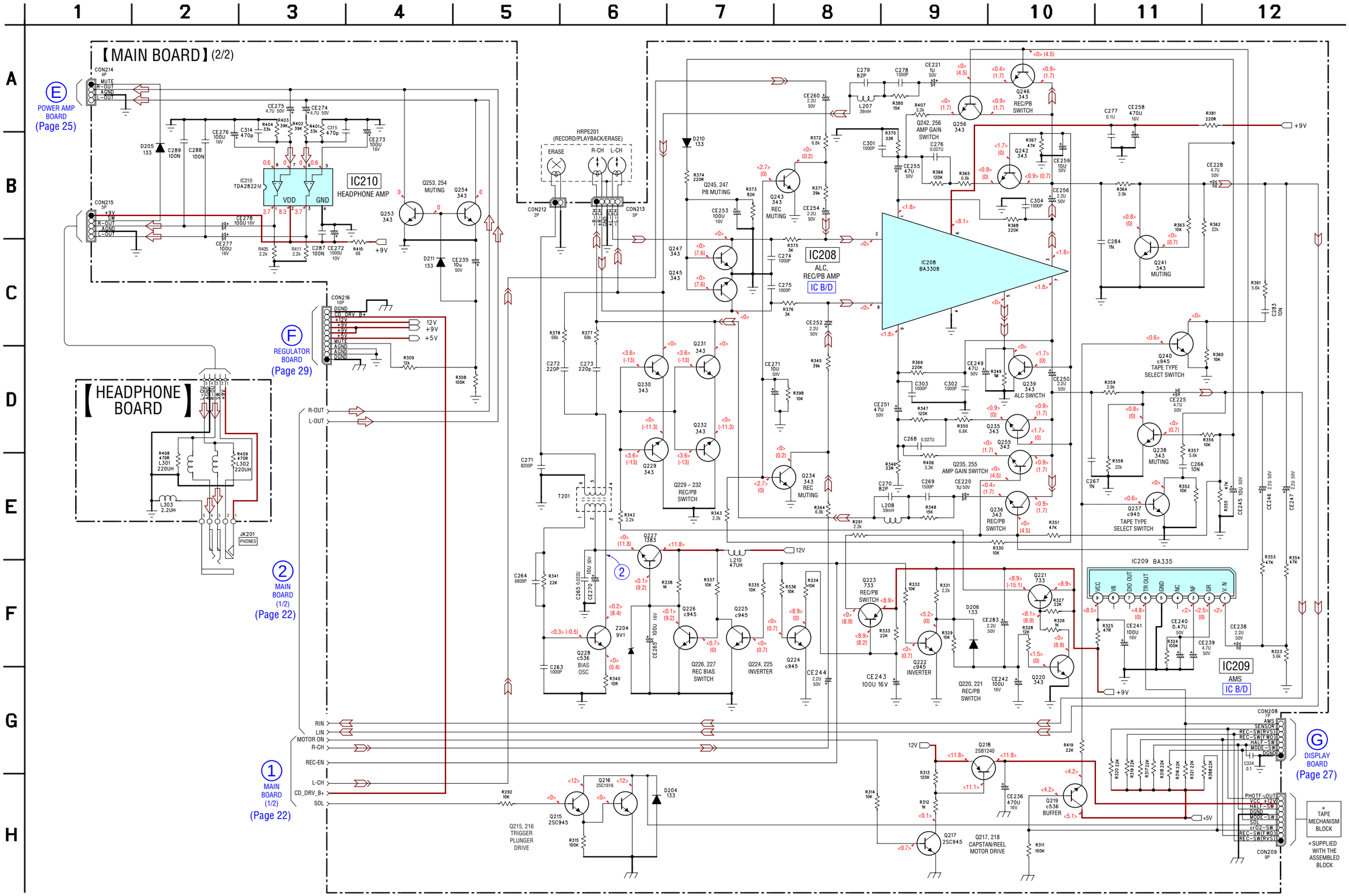
Ref. No.	Location
CON219	F-2
D201	D-3
D202	D-3
D203	D-7
D204	H-10
D205	I-3
D206	H-11
D207	I-5
D210	F-9
D211	H-4
D212	B-11
IC201	F-6
IC202	D-4
IC203	C-7
IC204	C-13
IC205	E-12
IC206	G-12
IC207	I-6
IC208	G-10
IC209	C-12
IC210	I-4
Q201	B-3
Q202	C-5
Q204	E-5
Q205	B-5
Q206	C-4
Q207	B-4
Q208	D-7
Q209	C-7
Q210	B-11
Q211	B-12
Q215	H-10
Q216	H-9
Q217	H-9
Q218	I-9
Q219	G-14
Q220	H-12
Q221	I-12
Q222	H-11
Q223	H-11
Q224	H-10
Q225	H-13
Q226	H-12
Q227	H-12
Q228	H-13
Q229	G-12
Q230	G-12
Q231	G-12
Q232	G-12
Q234	H-11
Q235	G-9
Q236	G-9
Q237	D-11
Q238	F-8
Q239	G-10
Q240	C-11
Q241	F-8
Q242	G-9
Q243	E-11
Q245	F-11
Q246	F-9
Q247	F-11
Q248	B-13
Q249	B-13
Q250	B-13
Q251	B-13
Q252	F-4
Q253	H-5
Q254	H-4
Q255	G-9
Q256	F-9
VC203	F-3
VC204	F-3
Z201	B-5
Z202	F-13
Z203	E-13
Z204	I-12

5-7. SCHEMATIC DIAGRAM – MAIN Section (1/2) – • See page 20 for Waveforms. • See page 30 for IC Block Diagrams.


【MAIN BOARD】(1/2)
IC203 RDS DECODER IC B/D
IC202 FM/AM IF AMP, MIX, MPX DET, OSC IC B/D
IC201 FM/AM PLL IC B/D
IC204 FUNCTION SELECT IC B/D
IC205 CARRIAGE MOTOR DRIVE IC B/D
IC206 DRAWER MOTOR DRIVE IC B/D
IC207 INPUT SELECT, ELECTRICAL VOLUME IC B/D
CON219 OPTICAL TRANSCEIVER
(AEP, UK)
(Page 27)
(Page 23)
(Page 30)

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

5-8. SCHEMATIC DIAGRAM – MAIN Section (2/2) – • See page 20 for Waveform. • See page 30 for IC Block Diagrams.

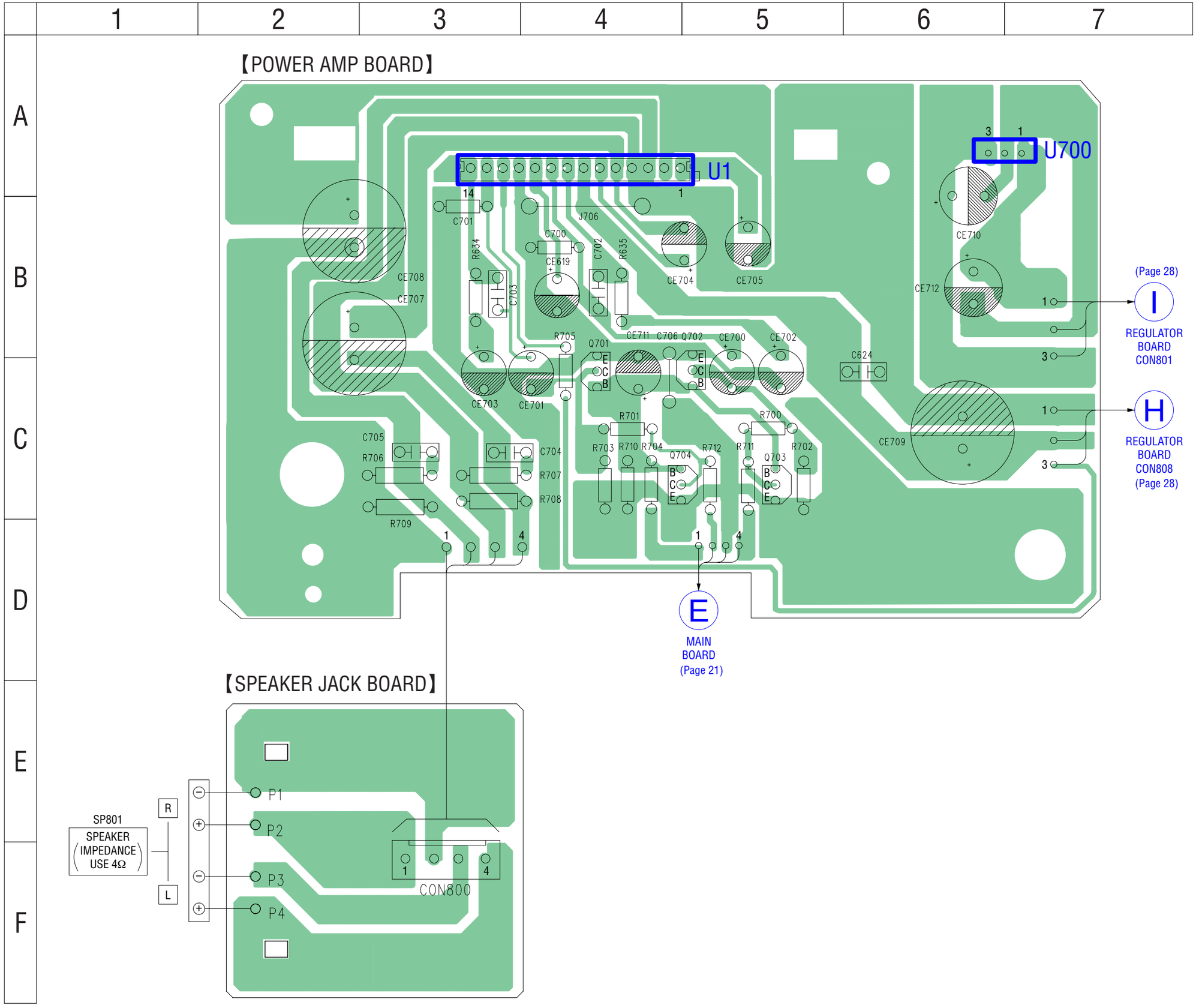


5-9. PRINTED WIRING BOARDS – POWER AMP Section –

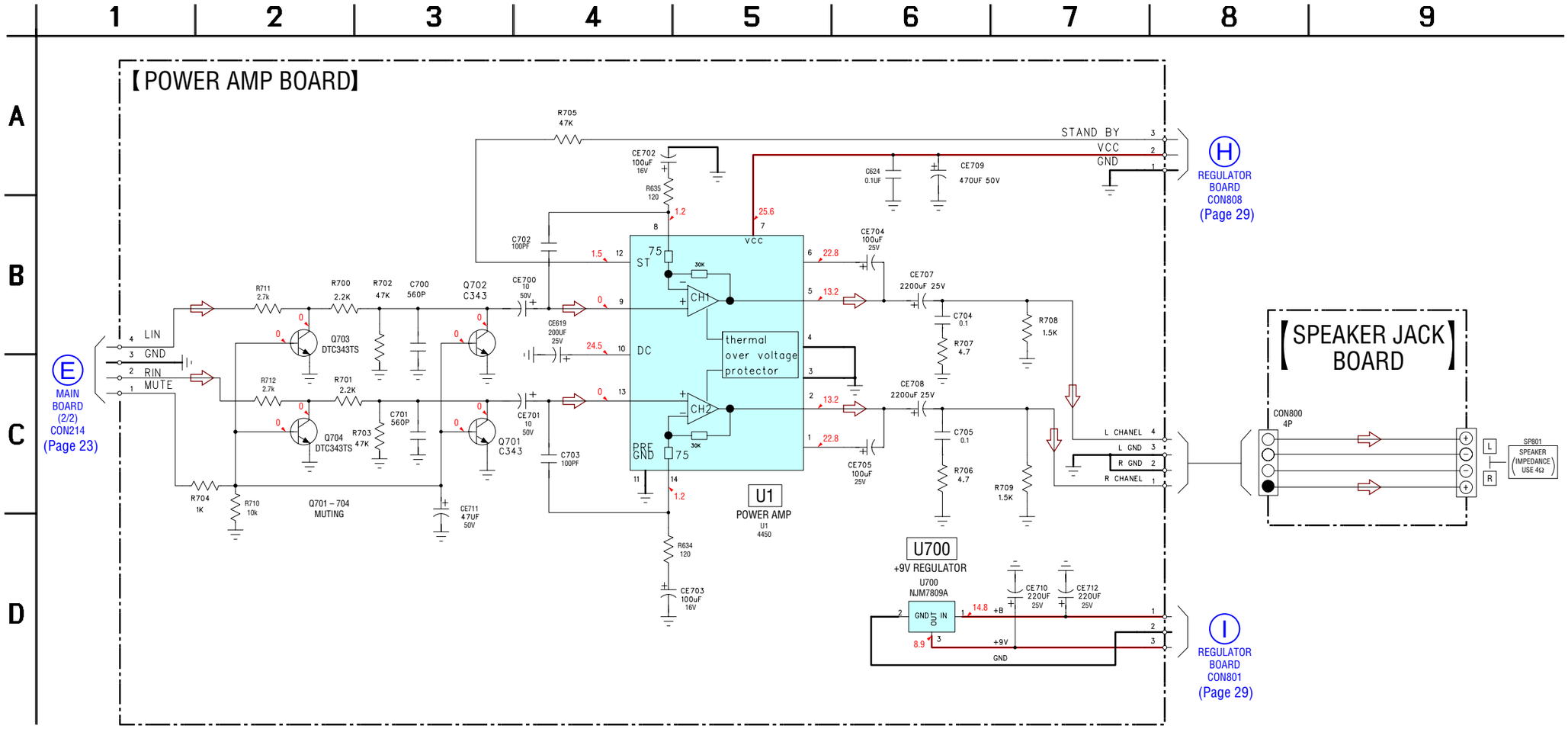
• See page 20 for Circuit Boards Location.

• **Semiconductor Location**

Ref. No.	Location
Q701	C-4
Q702	C-5
Q703	C-5
Q704	C-5
U700	A-7
U701	A-4



5-10. SCHEMATIC DIAGRAM – POWER AMP Section –

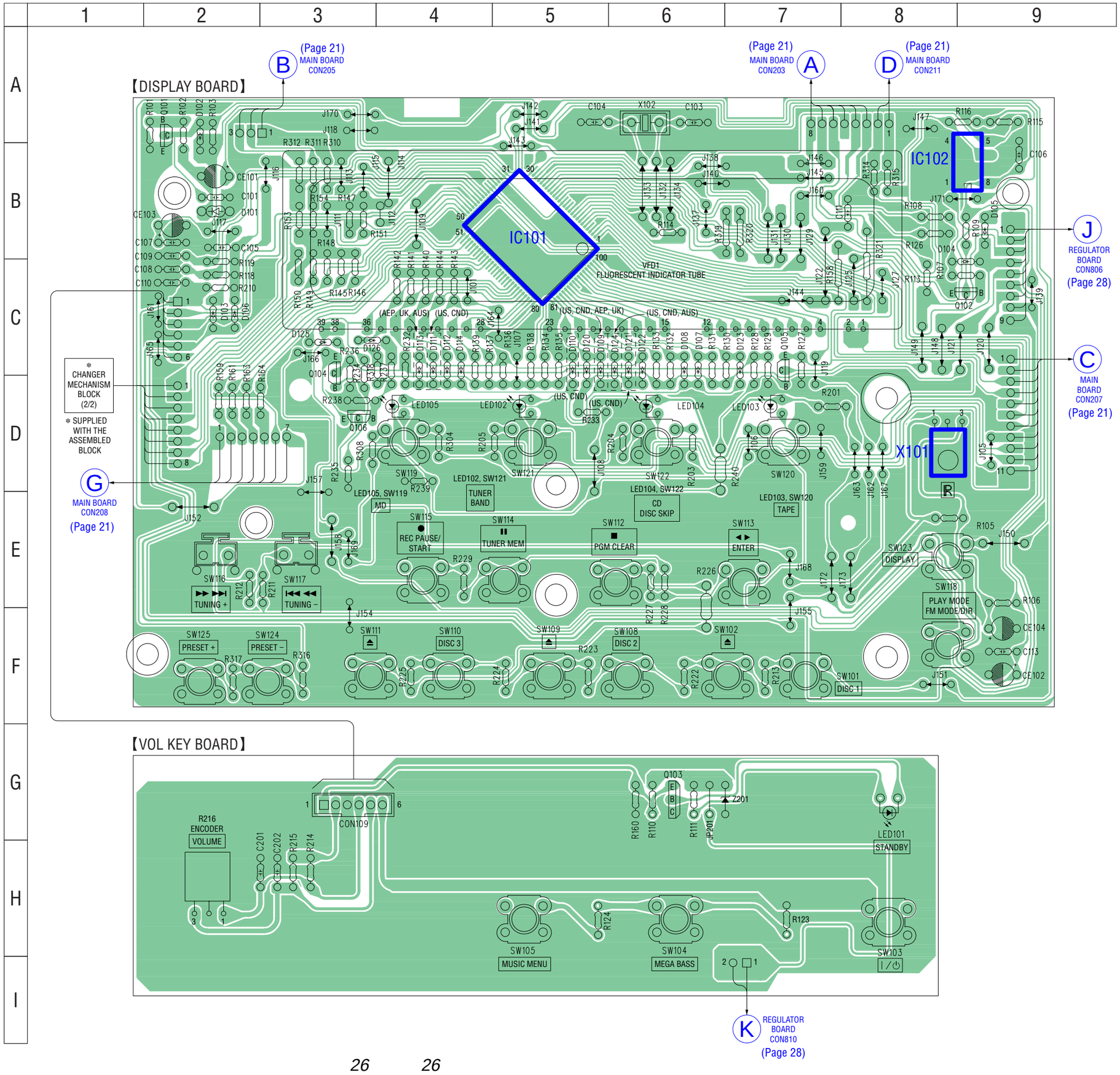


5-11. PRINTED WIRING BOARDS – DISPLAY Section –

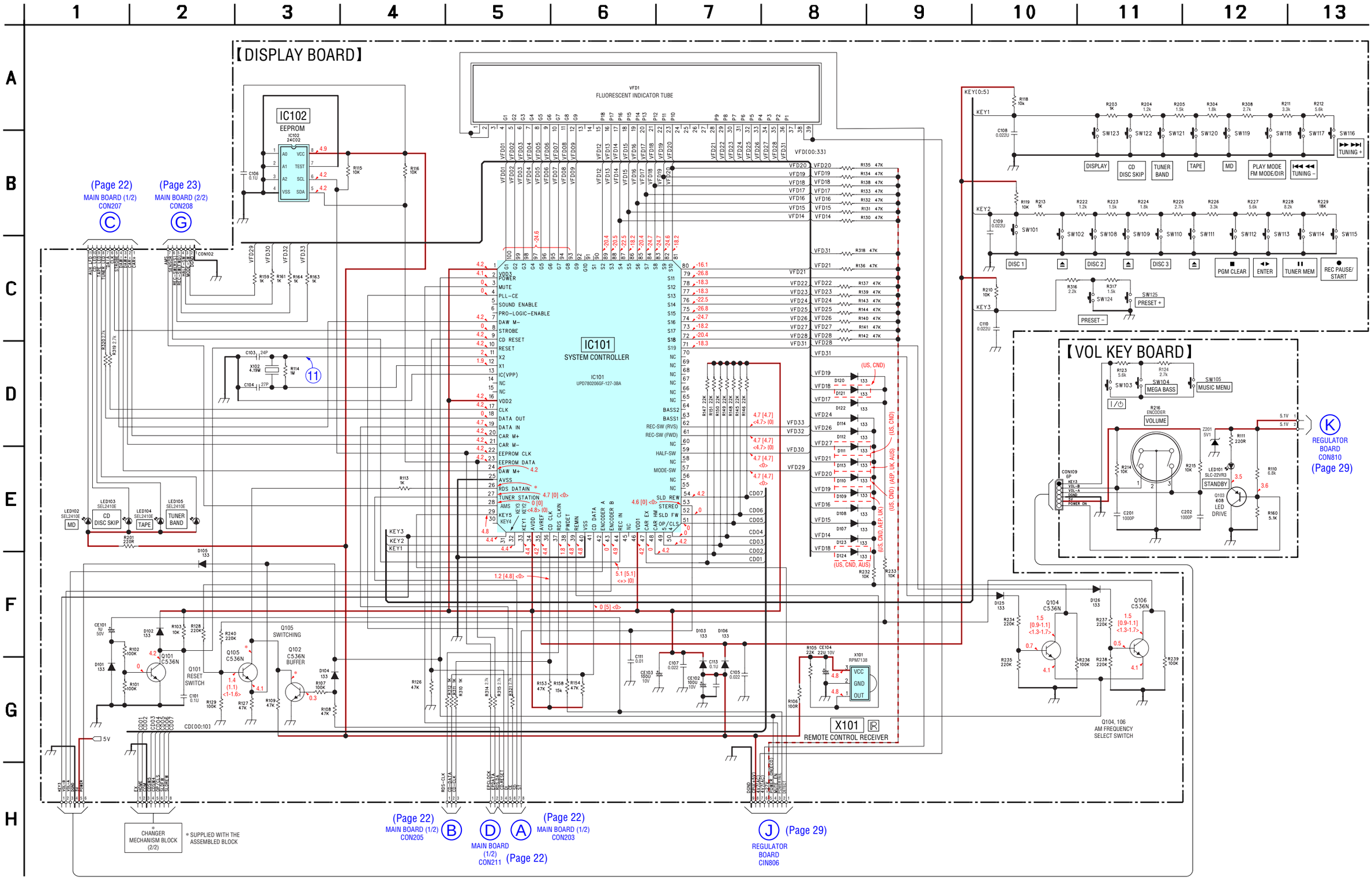
• See page 20 for Circuit Boards Location.

• **Semiconductor Location**

Ref. No.	Location
D101	B-2
D102	A-2
D103	C-2
D104	C-9
D105	B-9
D106	C-2
D107	C-6
D108	C-6
D109	C-5
D110	C-5
D111	C-4
D112	C-9
D113	C-4
D114	C-9
D120	C-5
D121	C-6
D122	C-6
D123	C-7
D124	C-6
D125	C-3
D126	C-3
IC101	B-5
IC102	B-9
LED101	G-8
LED102	D-5
LED103	D-7
LED104	D-6
LED105	D-4
Q101	A-2
Q102	C-9
Q103	G-6
Q104	C-3
Q105	C-7
Q106	D-3
X101	D-8
Z201	G-6



5-12. SCHEMATIC DIAGRAMS – DISPLAY Section – • See page 20 for Waveform.

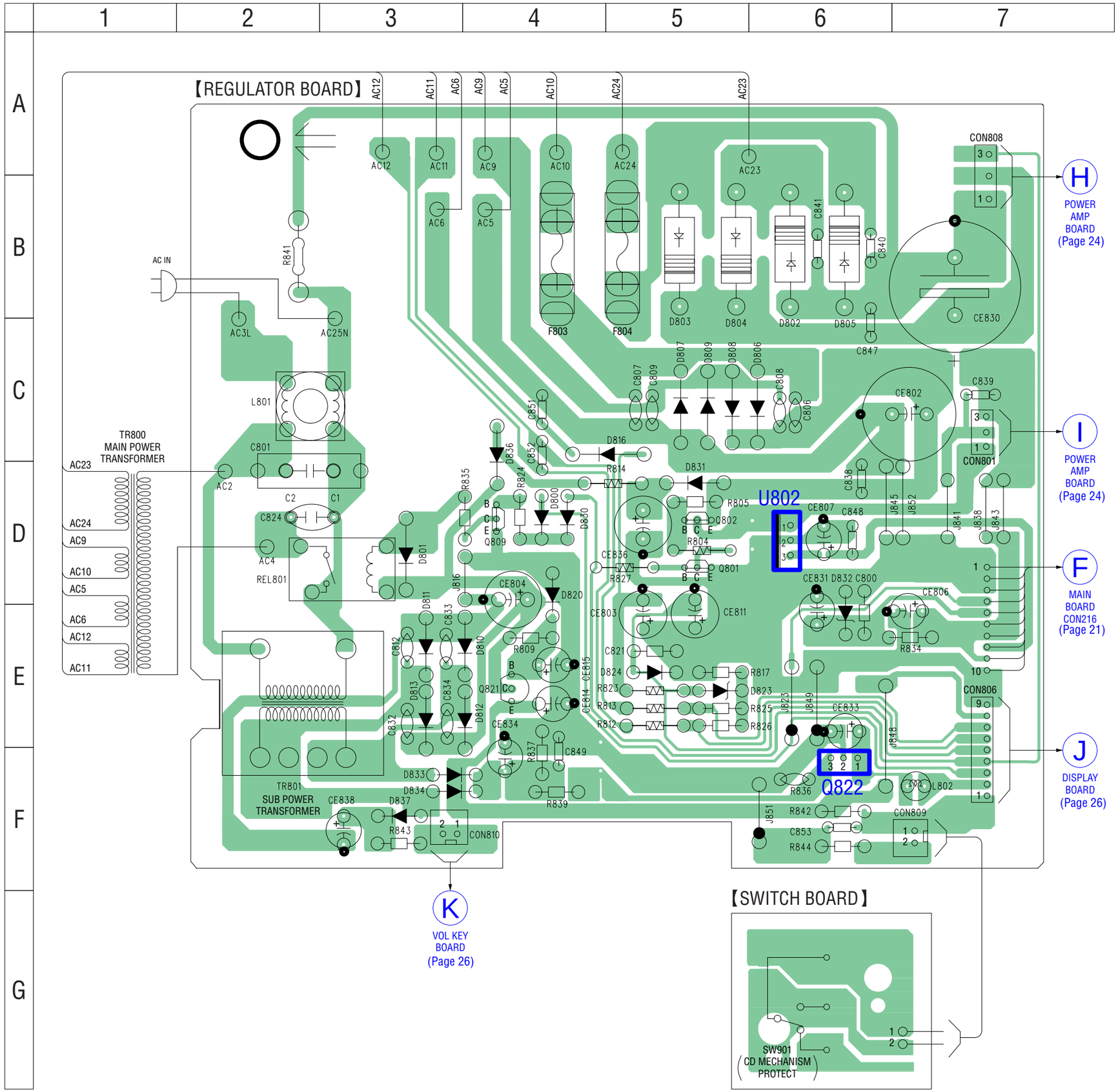


5-13. PRINTED WIRING BOARDS – REGULATOR Section –

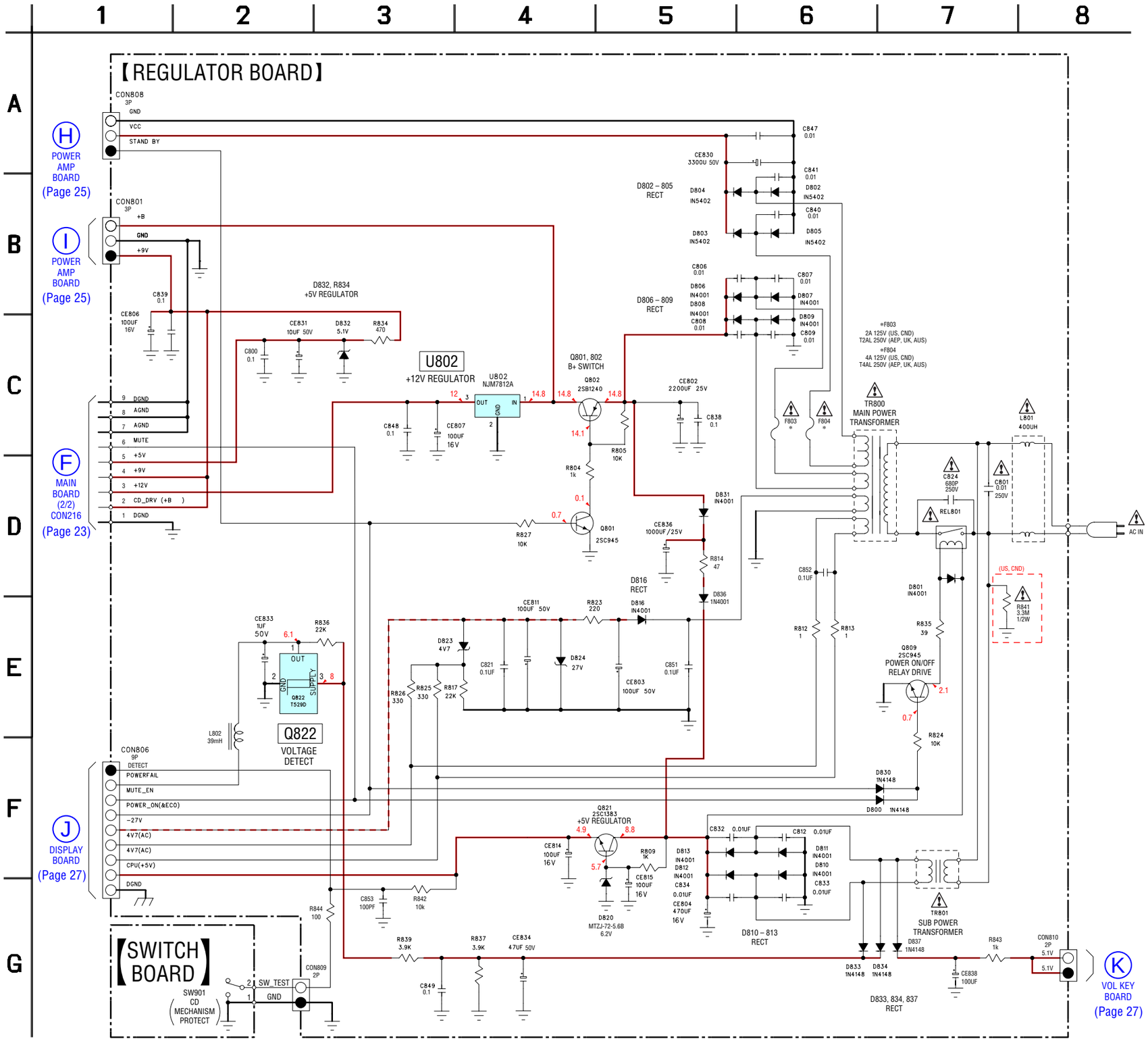
• See page 20 for Circuit Boards Location.

• **Semiconductor Location**

Ref. No.	Location
D800	D-4
D801	D-3
D802	B-6
D803	B-5
D804	B-5
D805	B-6
D806	C-6
D807	C-5
D808	C-5
D809	C-5
D810	E-4
D811	E-3
D812	E-4
D813	E-4
D816	C-5
D820	D-4
D823	E-5
D824	E-6
D830	D-4
D831	D-5
D832	E-6
D833	E-3
D834	E-3
D836	C-4
D837	F-3
Q801	D-5
Q802	D-5
Q809	D-4
Q821	E-4
Q822	F-6
U802	D-6



5-14. SCHEMATIC DIAGRAM – REGULATOR Section –

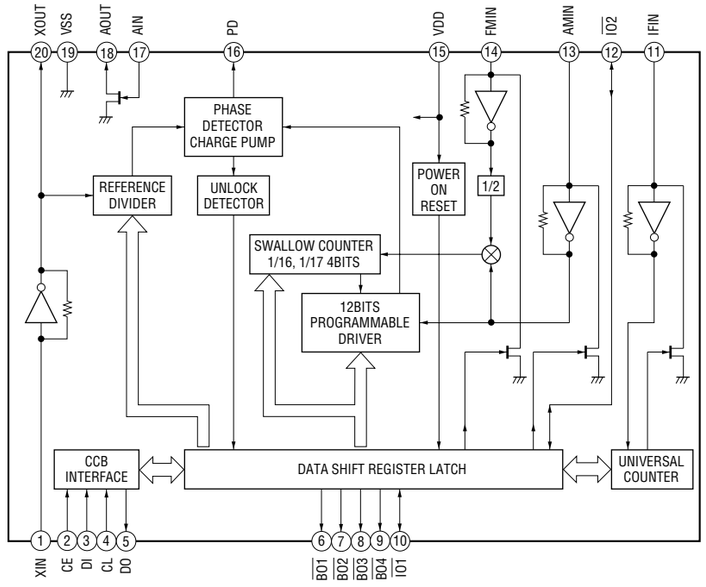


The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

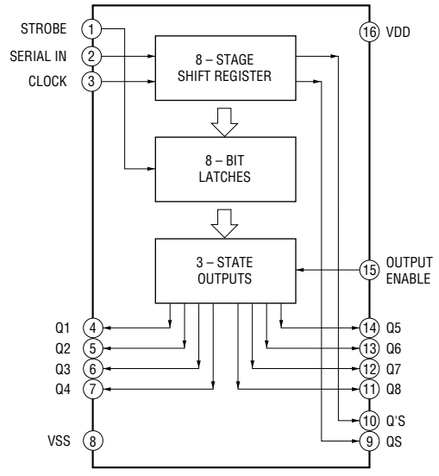
- **IC Block Diagrams**

– MAIN Board –

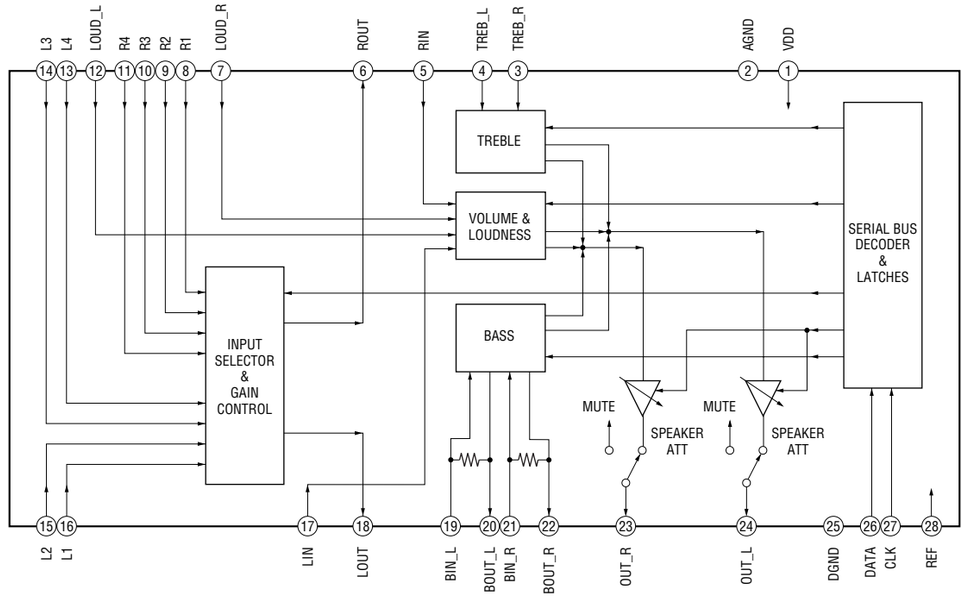
IC201 LC72131D



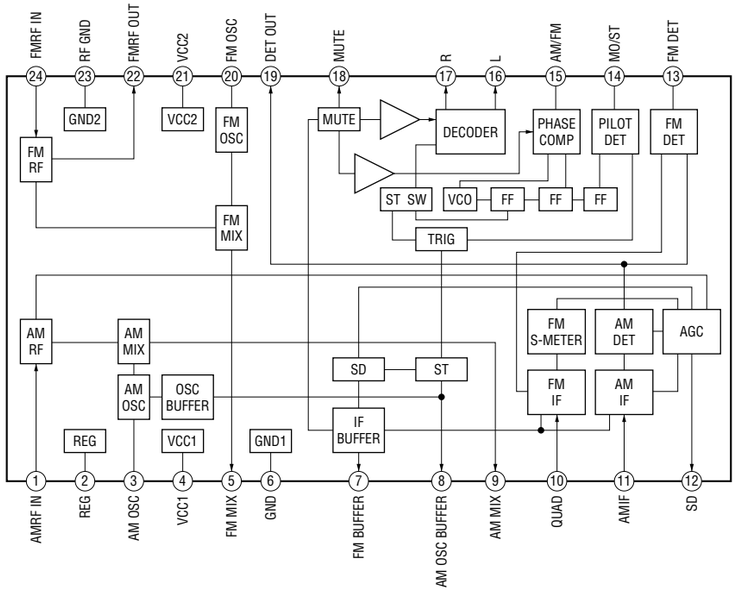
IC204 BU4094BC



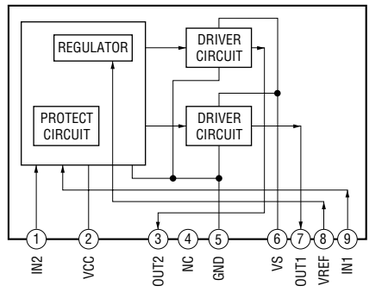
IC207 PT2314



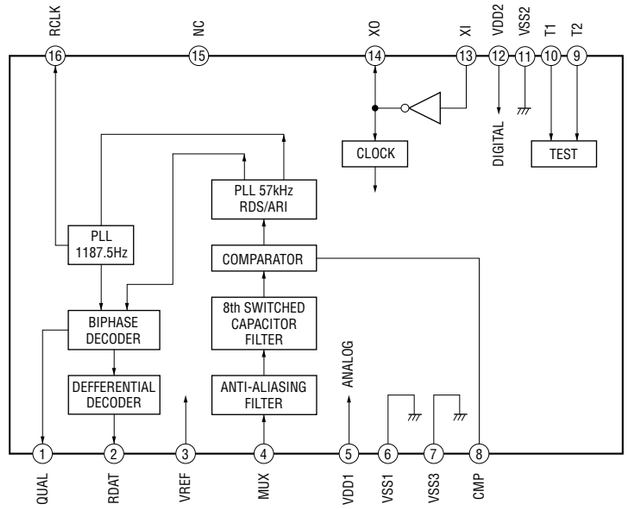
IC202 LA1823



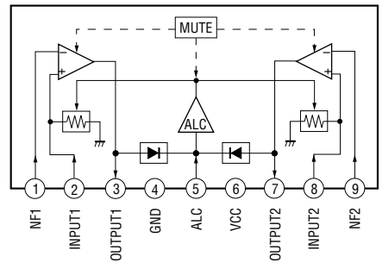
IC205, 206 TA7291S (J)



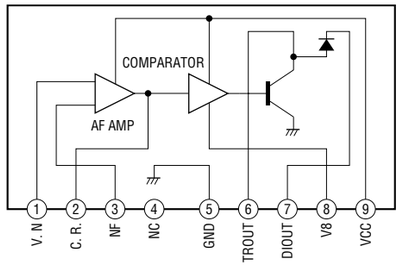
IC203 BU1924F-E2 (AEP, UK models)



IC208 BA3308



IC209 BA335



5-15. IC PIN FUNCTION DESCRIPTION

• DISPLAY BOARD IC101 μPD780206GF-127-3BA (SYSTEM CONTROLLER)

Pin No.	Pin Name	I/O	Description
1	VDD3	—	Power supply terminal (+4.2V)
2	POWER	O	Power on/off control signal output terminal "L": standby, "H": power on
3	MUTE	O	Muting on/off control signal output terminal "H": active
4	PLL-CE	O	PLL chip enable signal output to the FM/AM PLL "H" active
5	SOUND ENABLE	O	Sound enable signal output terminal Not used
6	PRO-LOGIC-ENABLE	O	Pro logic enable signal output terminal Not used
7	DAW M–	O	Drawer motor drive signal output terminal "L": active
8	STROBE	O	Strobe signal output for the function select IC
9	CD-RESET	O	Reset signal output to the CD block "L": reset
10	RESET	I	Reset signal input from the reset switch "L": reset
11	X2	O	System clock output terminal (4.19MHz)
12	X1	I	System clock input terminal (4.19MHz)
13	IC (VPP)	—	Connected to granud
14, 15	NC	—	Not used
16	VDD2	—	Power supply terminal (+4.2V)
17	CLK	O	Serial data transfer clock signal output to the function select IC
18	DATA OUT	O	Serial data output to the function select IC
19	DATA IN	I	Serial data input from the FM/AM PLL
20	CAR M+	O	Carriage motor drive signal output terminal "L": active
21	CAR M–	O	Carriage motor drive signal output terminal "L": active
22	EEPROM CLK	O	Serial data transfer clock signal output to the EEPROM and input select IC
23	EEPROM DATA	I/O	Two-way data bus with the EEPROM and input select IC
24	DAW M+	O	Drawer motor drive signal output terminal "L": active
25	AVSS	—	Ground terminal (for A/D converter)
26	RDS DATAIN	I	RDS serial data input terminal Not used
27	TUNER STATION	I	Tuning detection signal input from the LA1823 "L": tuned, "H": detuned
28	AMS	I	Automatic music sensor detection signal input terminal
29	KEY5	I	Key input terminal (A/D input)
30	KEY4	I	Key input terminal (A/D input) Not used
31 to 33	KEY3 to KEY1	I	Key input terminal (A/D input)
34	AVDD	—	Power supply terminal (for A/D converter) (+4.2V)
35	AVREF	I	Reference voltage (+4.4V) input terminal (for A/D converter)
36	CD CLK	O	Serial data transfer clock signal output to the CD block
37	RDS CLKIN	I	RDS serial data transfer clock signal input terminal Not used
38	PWDET	I	Power failure detection signal input terminal "L": power failure, "H": power on
39	REMIN	I	Remote control signal input from the remote control receiver
40	VSS	—	Ground terminal
41	CD-DATA	O	Serial data output to the CD block
42	ENCODER A	I	Jog dial pulse input from the rotary encoder (A phase input)
43	ENCODER B	I	Jog dial pulse input from the rotary encoder (B phase input)
44	REC IN	I	Tape play/rec detect sensor input terminal "L" input when the tape play/rec detect
45	NC	—	Not used
46	VDD1	—	Power supply terminal (+4.2V)
47	CAR EX	I	Switch input from the CD block "H": when elevator is moving

Pin No.	Pin Name	I/O	Description
48	CAR HM	I	Switch input from the CD block "H": home position
49	4	I	Switch input from the CD block
50	5	I	Switch input from the CD block
51	OP/CLS	I	Switch input from the CD block "L": When tray open/close completely
52	SLD FW	I	Switch input from the CD block "L": when tray is close
53	STEREO	I	FM stereo detection signal input from the LA1823 "H": stereo
54	SLD REW	I	Switch input from the CD block "L": when tray is open
55, 56	NC	—	Not used
57	MODE-SW	I	Head position detect switch input terminal "H": reverse direction, "L": forward direction
58	NC	—	Not used
59	HALF-SW	I	Cassette tape detect switch input terminal "H": no cassette, "L": cassette in
60	NC	—	Not used
61	REC-SW (FWD)	I	Rec-proof claw (forward direction) detection signal input from the protect detect switch "L": recording possible, "H": protect
62	REC-SW (RVS)	I	Rec-proof claw (reverse direction) detection signal input from the protect detect switch "L": recording possible, "H": protect
63, 64	BASS1, BASS2	—	Not used
65 to 70	NC	—	Not used
71, 72	S19, S18	I/O	Segment drive signal output terminal AM frequency select switch input terminal
73 to 90	S17 to S1	O	Segment drive signal output terminal
91, 92	G10, G9	O	Grid drive signal output terminal Not used
93 to 100	G8 to G1	O	Grid drive signal output terminal

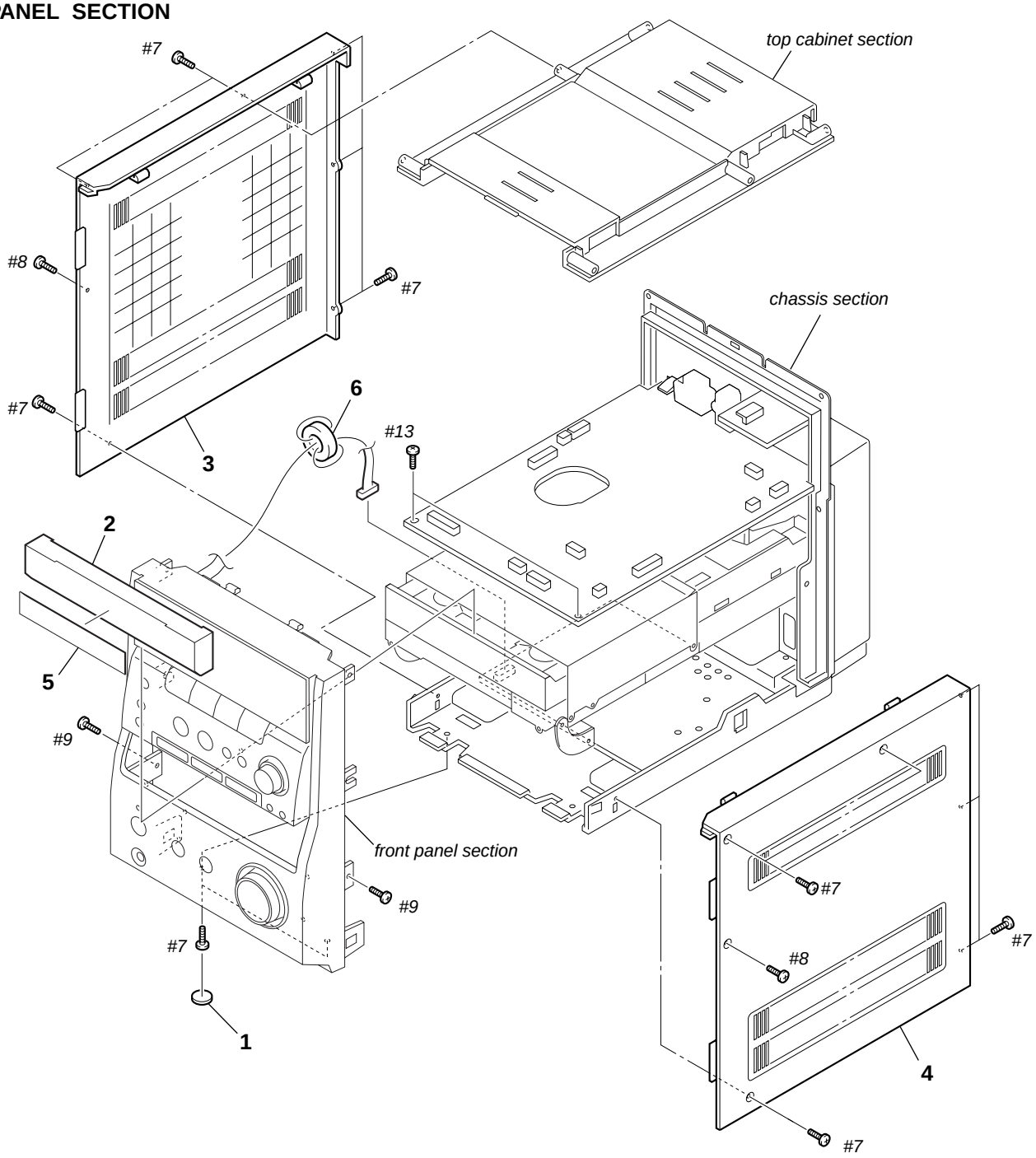
SECTION 6
EXPLODED VIEWS

NOTE:
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB, BALANCE (WHITE) . . . (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

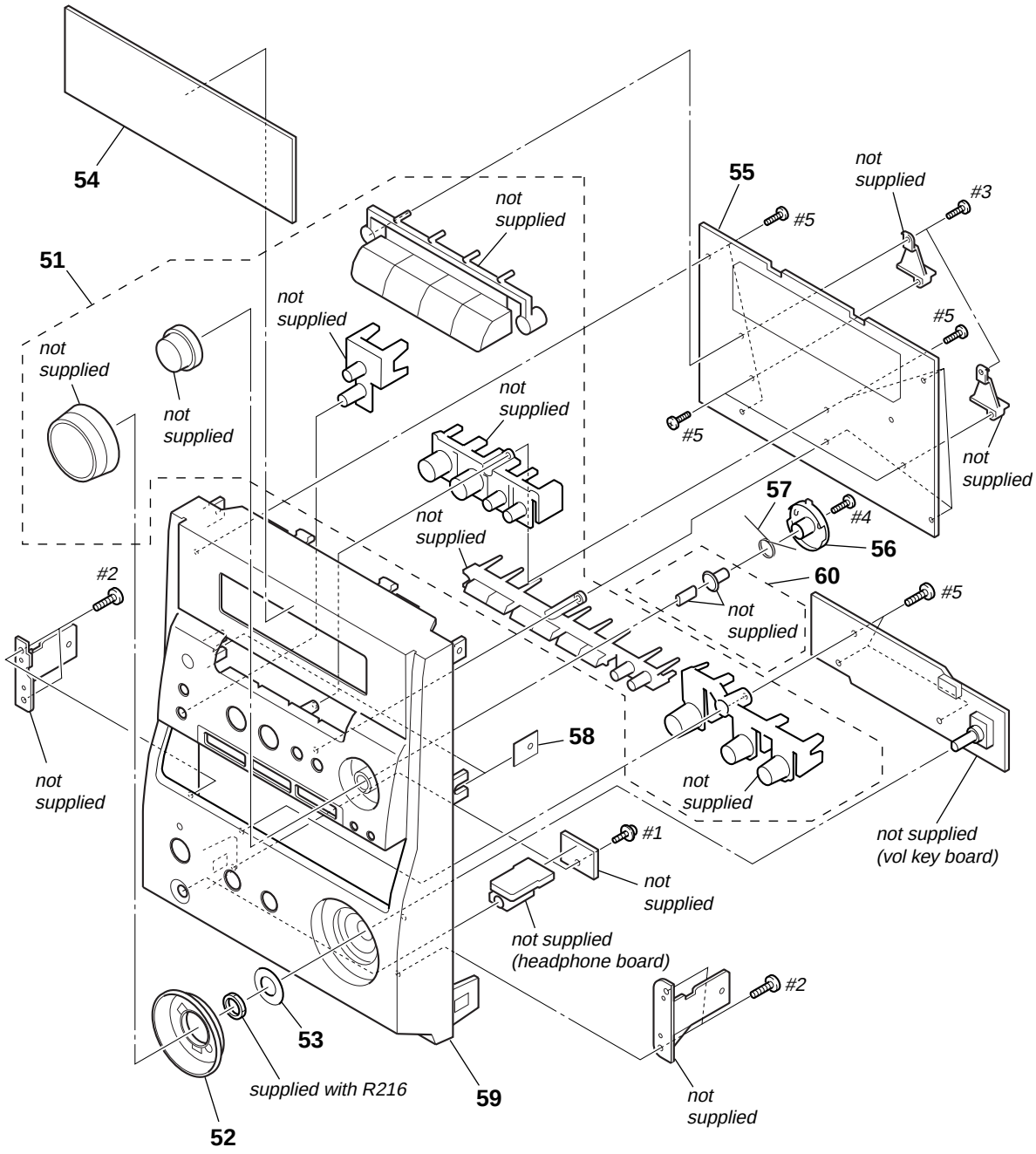
Les composants identifiés par une marque ⚠ sont critiquens pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

6-1. PANEL SECTION



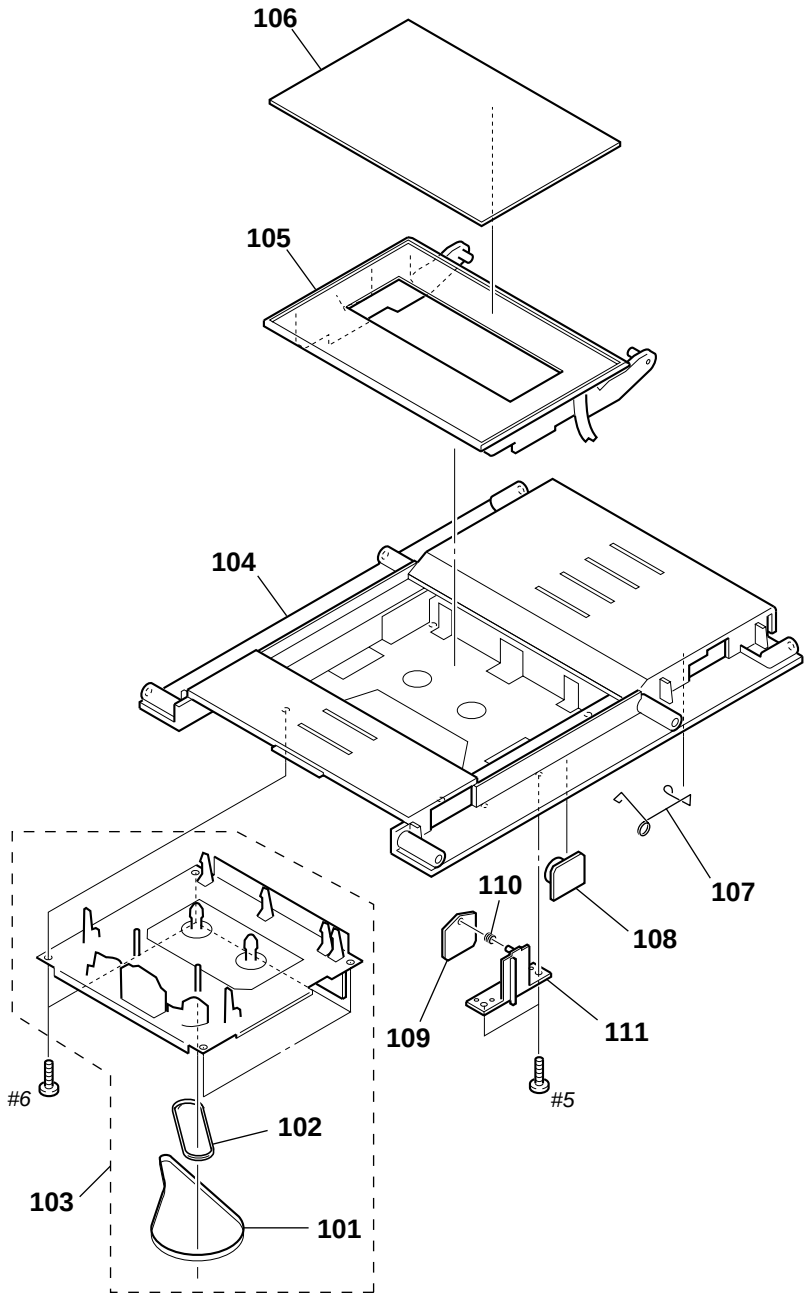
Ref. No.	Part No.	Description	Remark
1	4-242-007-01	RUBBER (FOOT)	
2	4-242-032-01	CD LID	
3	4-242-005-01	SIDE PANEL (L) (US, CND)	
3	4-243-165-01	SIDE PANEL (L) (AEP, UK, AUS)	
4	4-242-006-01	SIDE PANEL (R) (US, CND)	
4	4-243-166-01	SIDE PANEL (R) (AEP, UK, AUS)	
5	4-242-029-01	CD LID WINDOW	
6	1-500-712-11	CORE, FERRITE	
#7	7-685-246-14	SCREW +KTP 3X8 TYPE2 NON-SLIT	
#8	7-682-248-04	SCREW +K 3X8	
#9	7-685-647-14	SCERW +BVTP 3X10 TYPE2 SLIT	
#13	7-685-648-14	SCREW +BVTP 3X12 TYPE2 SLIT	

6-2. FRONT PANEL SECTION



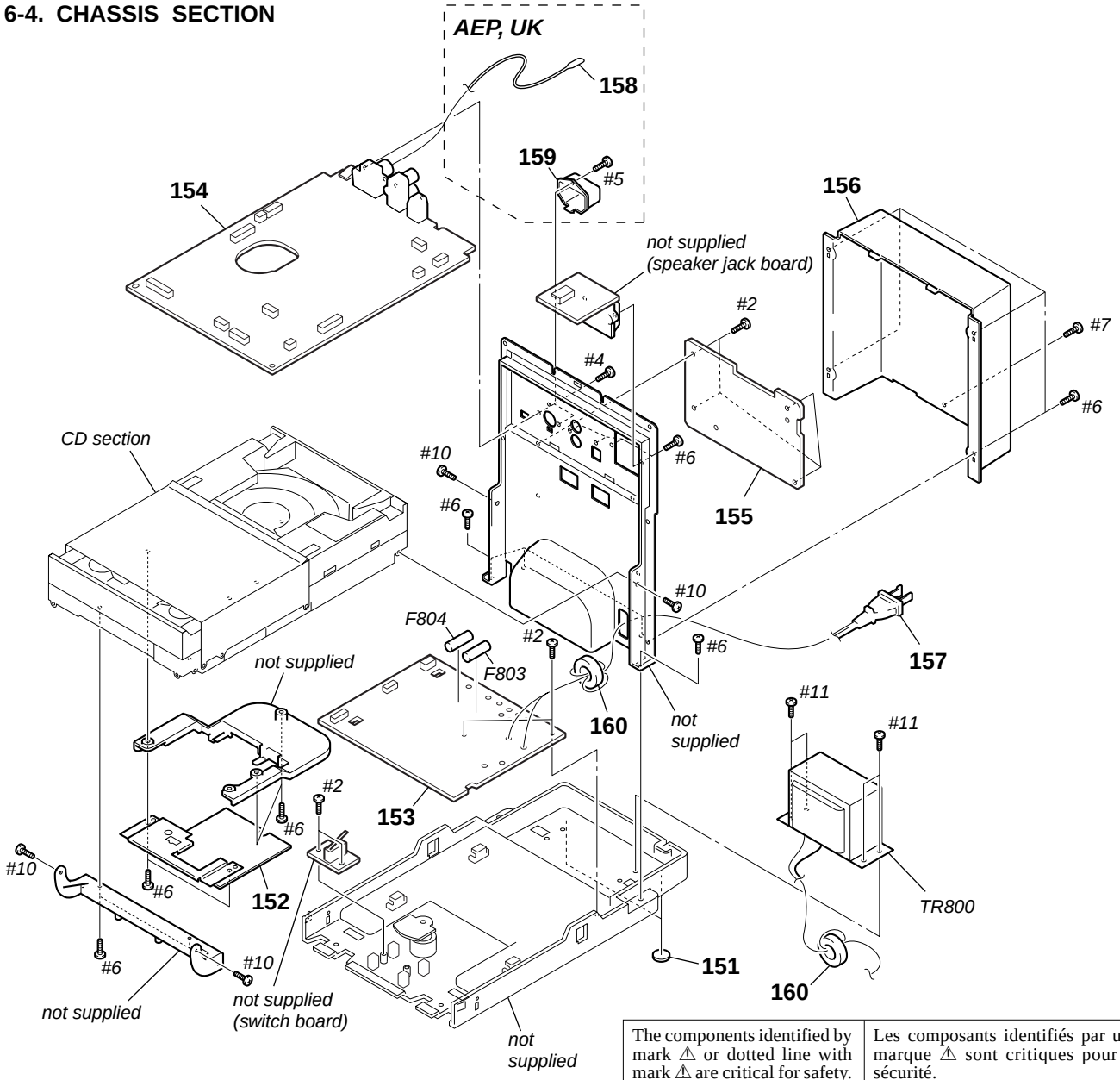
Ref. No.	Part No.	Description	Remark
51	X-4955-068-1	KNOB ASSY	
52	4-242-013-01	VOLUME DECORATION RING	
53	4-826-537-11	WASHER, SPECIAL	
54	4-242-012-01	VFD WINDOW (US, CND AUS)	
54	4-243-170-01	VFD WINDOW (AEP, UK)	
55	A-4730-425-A	DISPLAY BOARD, COMPLETE (US, CND)	
55	A-4730-625-A	DISPLAY BOARD, COMPLETE (AEP, UK)	
55	A-4730-716-A	DISPLAY BOARD, COMPLETE (AUS)	
56	4-242-018-01	TUNING SWING LEVER	
57	4-242-028-01	TUNING SHAFT SPRING	
58	4-235-994-01	PANEL FIXING PLATE	
59	4-242-027-01	FRONT PANEL	
60	4-242-019-01	TUNING SWING SHAFT	
#1	7-685-135-19	SCREW +P2.6X10 TYPE2 NON-SLIT	
#2	7-685-646-14	SCREW +BVTP 3X8 TYPE2 SLIT	
#3	7-685-536-14	SCREW +BTP 2.6X12 TYPE2 N-S	
#4	7-685-854-04	SCREW +BVTT 2X8 (S)	
#5	7-685-534-14	SCREW +BTP 2.6X8 TYPE2 N-S	

6-3. TOP CABINET SECTION



Ref. No.	Part No.	Description	Remark
101	4-235-777-01	BELT (FR)	
102	3-709-645-01	BELT SR	
103	1-796-544-11	DECK, MECH (CRL4349)	
104	4-242-009-01	TOP CABINET (US, CND)	
104	4-243-172-01	TOP CABINET (AEP, UK, AUS)	
105	4-242-010-01	CASS LID & BKT	
106	4-242-008-01	CASS LID WINDOW	
107	4-242-011-01	CASS LID SPRING	
108	4-236-899-01	DAMPER	
109	4-236-906-01	CASS LID LATCH	
110	4-236-905-01	CASS LATCH SPRING	
111	4-236-907-01	CASS LID LATCH HOLDER	
#5	7-685-534-14	SCREW +BTP 2.6X8 TYPE2 N-S	
#6	7-685-647-14	SCREW +BVTP 3X10 TYPE2 SLIT	

6-4. CHASSIS SECTION



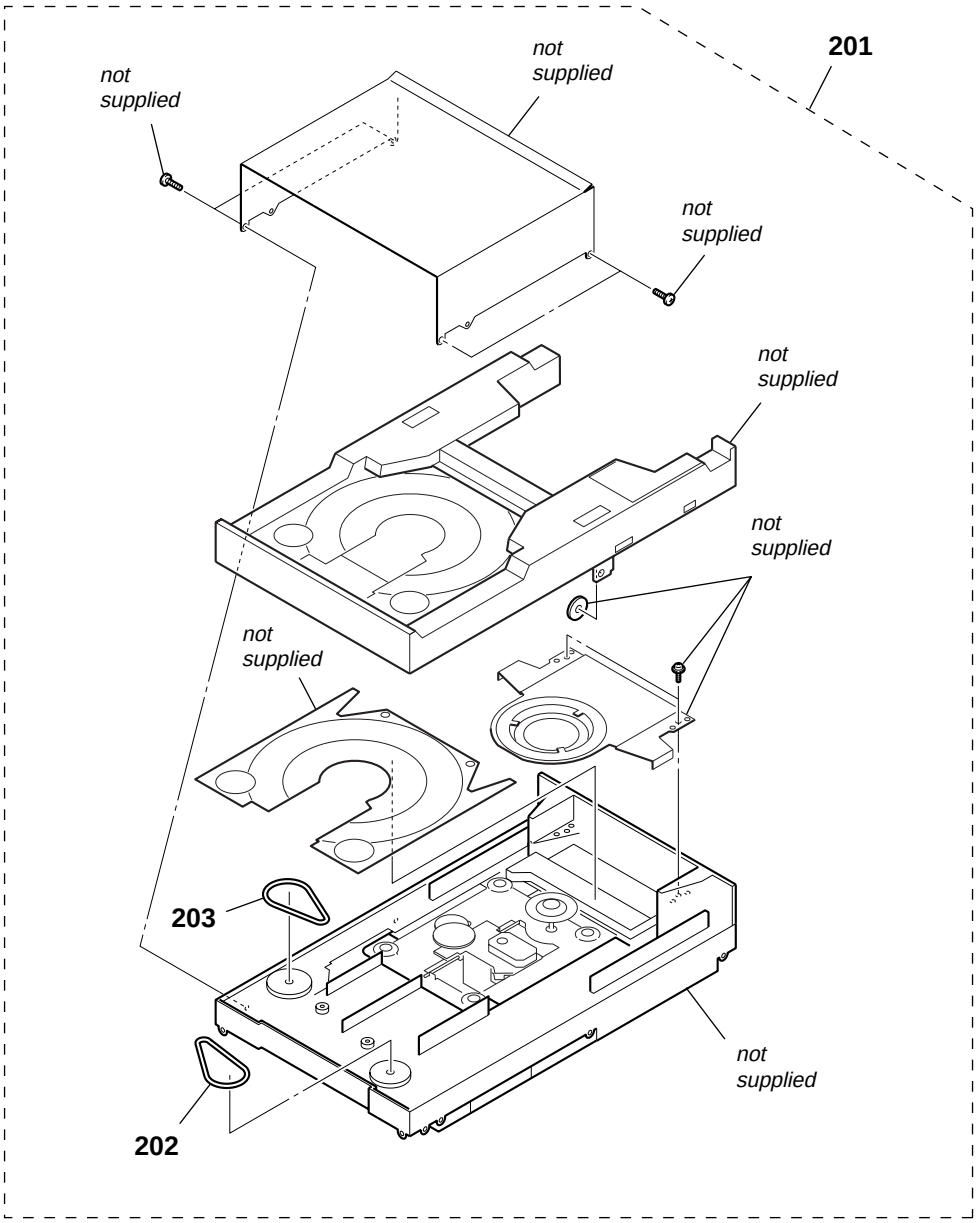
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
151	4-242-007-01	RUBBER (FOOT)	
152	1-761-636-11	PC BOARD ASSY	
153	A-4730-430-A	REGULATOR BOARD, COMPLETE (US, CND)	
153	A-4730-624-A	REGULATOR BOARD, COMPLETE	(AEP, UK, AUS)
154	A-4730-428-A	MAIN BOARD, COMPLETE (US, CND, AUS)	
154	A-4730-626-A	MAIN BOARD, COMPLETE (AEP, UK)	
155	A-4730-429-A	POWER AMP BOARD, COMPLETE	
156	4-242-004-01	REAR COVER (US, CND)	
156	4-243-164-01	REAR COVER (AEP, UK, AUS)	
⚠157	1-555-750-00	CORD, POWER (AEP)	
⚠157	1-696-535-11	CORD, POWER (UK)	
⚠157	1-696-966-31	CORD, POWER (AUS)	
⚠157	1-783-820-11	CORD, POWER (US, CND)	
158	1-823-170-11	CORD (WITH CONNECTOR) (FM ANT)	(AEP, UK)
159	4-243-167-01	ANTENNA JACK COVER (AEP, UK)	
160	1-500-712-11	CORE, FERRITE	

Ref. No.	Part No.	Description	Remark
⚠F803	1-533-296-11	FUSE, GLASS CYLINDRICAL (DIA.5) (2A/125V)	(US, CND)
⚠F803	1-533-468-11	FUSE, GLASS TUBE (DIA.5) (2A/250V)	(AEP, UK, AUS)
⚠F804	1-533-419-11	FUSE, GLASS CYLINDRICAL (DIA.5) (4A/125V)	(US, CND)
⚠F804	1-533-471-11	FUSE, GLASS TUBE (DIA.5) (4A/250V)	(AEP, UK AUS)
⚠TR800	1-437-955-11	TRANSFORMER, POWER (US, CND)	
⚠TR800	1-437-957-11	TRANSFORMER, POWER (AEP, UK, AUS)	
#2	7-685-646-14	SCREW +BVTP 3X8 TYPE2 SLIT	
#4	7-685-854-04	SCREW +BVTT 2X8 (S)	
#5	7-685-534-14	SCREW +BTP 2.6X8 TYPE2 N-S	
#6	7-685-647-14	SCREW +BVTP 3X10 TYPE2 SLIT	
#7	7-685-246-14	SCREW +KTP 3X8 TYPE2 NON-SLIT	
#10	7-685-645-14	SCREW +BVTP 3X6 TYPE2 SLIT	
#11	7-685-903-31	SCREW +PTPWH 3X10 (TYPE2)	

6-5. CD SECTION

Note: When exchanging Ref. No. 201, refer to "NOTE FOR EXCHANGING A CD MECHANICAL (CMCJ-0132)" of a SERVICING NOTES.



Ref. No.	Part No.	Description	Remark
201	1-796-542-11	MECHANICAL, CD (CMCJ-0132)	
202	4-243-504-01	BELT (BLACK)	
203	4-243-505-01	BELT (GRAY)	

SECTION 7
ELECTRICAL PARTS LIST

DISPLAY

NOTE:
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL: Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F: nonflammable
- Abbreviation
  AUS : Australian model
  CND : Canadian model
- Items marked "*" are not stocked since they are seldom required for routine service.
  Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u: μ, for example:
  uA. . : μA. . uPA. . : μPA. .
  uPB. . : μPB. . uPC. . : μPC. .
  uPD. . : μPD. .
- CAPACITORS
  uF: μF
- COILS
  uH: μH

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiquens pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
	A-4730-425-A	DISPLAY BOARD, COMPLETE (US, CND)			
	A-4730-625-A	DISPLAY BOARD, COMPLETE (AEP, UK)			
	A-4730-716-A	DISPLAY BOARD, COMPLETE (AEP)			
		**********			
		< CAPACITOR >			
C101	1-164-159-21	CERAMIC	0.1uF		50V
C103	1-162-208-31	CERAMIC	24PF	5%	50V
C104	1-128-802-21	CERAMIC	27PF	5%	50V
C105	1-127-880-21	CERAMIC	0.022uF	10%	50V
C106	1-164-159-21	CERAMIC	0.1uF		50V
C107	1-127-880-21	CERAMIC	0.022uF	10%	50V
C108	1-127-880-21	CERAMIC	0.022uF	10%	50V
C109	1-127-880-21	CERAMIC	0.022uF	10%	50V
C110	1-127-880-21	CERAMIC	0.022uF	10%	50V
C111	1-127-876-21	CERAMIC	0.01uF	10%	50V
C113	1-164-159-21	CERAMIC	0.1uF		50V
CE101	1-115-871-11	ELECT	1uF	20%	50V
CE102	1-126-382-11	ELECT	100uF	20%	10V
CE103	1-126-382-11	ELECT	100uF	20%	10V
CE104	1-126-514-11	ELECT	22uF	20%	10V
		< DIODE >			
D101	8-719-991-33	DIODE	1SS133T-77		
D102	8-719-991-33	DIODE	1SS133T-77		
D103	8-719-991-33	DIODE	1SS133T-77		
D104	8-719-991-33	DIODE	1SS133T-77		
D105	8-719-991-33	DIODE	1SS133T-77		
D106	8-719-991-33	DIODE	1SS133T-77		
D107	8-719-991-33	DIODE	1SS133T-77		
D108	8-719-991-33	DIODE	1SS133T-77		
D109	8-719-991-33	DIODE	1SS133T-77 (US, CND, AEP, UK)		
D110	8-719-991-33	DIODE	1SS133T-77 (US, CND)		
D111	8-719-991-33	DIODE	1SS133T-77 (US, CND)		
D112	8-719-991-33	DIODE	1SS133T-77		
D113	8-719-991-33	DIODE	1SS133T-77 (AEP, UK, AUS)		
D114	8-719-991-33	DIODE	1SS133T-77		
D120	8-719-991-33	DIODE	1SS133T-77		
D121	8-719-991-33	DIODE	1SS133T-77 (US, CND)		
D122	8-719-991-33	DIODE	1SS133T-77		
D123	8-719-991-33	DIODE	1SS133T-77		
D124	8-719-991-33	DIODE	1SS133T-77 (US, CND, AUS)		
D125	8-719-991-33	DIODE	1SS133T-77		
D126	8-719-991-33	DIODE	1SS133T-77		

Ref. No.	Part No.	Description			Remark
		< IC >			
IC101	6-802-208-01	IC	uPD780206GF-127-3BA		
IC102	8-759-251-04	IC	ST24C02AB1		
		< LED >			
LED102	8-719-301-42	LED	SEL2410E (MD)		
LED103	8-719-301-42	LED	SEL2410E (CD/DISC SKIP)		
LED104	8-719-301-42	LED	SEL2410E (TAPE)		
LED105	8-719-301-42	LED	SEL2410E (TUNER/BAND)		
		< TRANSISTOR >			
Q101	8-729-281-53	TRANSISTOR	2SC536NP-F		
Q102	8-729-281-53	TRANSISTOR	2SC536NP-F		
Q104	8-729-281-53	TRANSISTOR	2SC536NP-F		
Q105	8-729-281-53	TRANSISTOR	2SC536NP-F		
Q106	8-729-281-53	TRANSISTOR	2SC536NP-F		
		< RESISTOR >			
R101	1-249-441-11	CARBON	100K	5%	1/4W
R102	1-249-441-11	CARBON	100K	5%	1/4W
R103	1-249-429-11	CARBON	10K	5%	1/4W
R105	1-249-433-11	CARBON	22K	5%	1/4W
R106	1-247-807-31	CARBON	100	5%	1/4W
R107	1-249-441-11	CARBON	100K	5%	1/4W
R108	1-249-437-11	CARBON	47K	5%	1/4W
R109	1-249-437-11	CARBON	47K	5%	1/4W
R113	1-249-417-11	CARBON	1K	5%	1/4W
R114	1-247-903-00	CARBON	1M	5%	1/4W
R115	1-249-429-11	CARBON	10K	5%	1/4W
R116	1-249-429-11	CARBON	10K	5%	1/4W
R118	1-249-429-11	CARBON	10K	5%	1/4W
R119	1-249-429-11	CARBON	10K	5%	1/4W
R126	1-249-437-11	CARBON	47K	5%	1/4W
R127	1-249-437-11	CARBON	47K	5%	1/4W
R128	1-247-887-00	CARBON	220K	5%	1/4W
R129	1-249-441-11	CARBON	100K	5%	1/4W
R130	1-249-437-11	CARBON	47K	5%	1/4W
R131	1-249-437-11	CARBON	47K	5%	1/4W
R132	1-249-437-11	CARBON	47K	5%	1/4W
R133	1-249-437-11	CARBON	47K	5%	1/4W
R134	1-249-437-11	CARBON	47K	5%	1/4W
R135	1-249-437-11	CARBON	47K	5%	1/4W
R136	1-249-437-11	CARBON	47K	5%	1/4W

DISPLAY | HEADPHONE | MAIN

Ref. No.	Part No.	Description			Remark
R137	1-249-437-11	CARBON	47K	5%	1/4W
R138	1-249-437-11	CARBON	47K	5%	1/4W
R139	1-249-437-11	CARBON	47K	5%	1/4W
R140	1-249-437-11	CARBON	47K	5%	1/4W
R141	1-249-437-11	CARBON	47K	5%	1/4W
R142	1-249-437-11	CARBON	47K	5%	1/4W
R143	1-249-437-11	CARBON	47K	5%	1/4W
R144	1-249-437-11	CARBON	47K	5%	1/4W
R145	1-249-433-11	CARBON	22K	5%	1/4W
R146	1-249-433-11	CARBON	22K	5%	1/4W
R147	1-249-433-11	CARBON	22K	5%	1/4W
R148	1-249-433-11	CARBON	22K	5%	1/4W
R149	1-249-433-11	CARBON	22K	5%	1/4W
R150	1-249-433-11	CARBON	22K	5%	1/4W
R151	1-249-433-11	CARBON	22K	5%	1/4W
R153	1-249-437-11	CARBON	47K	5%	1/4W
R154	1-249-437-11	CARBON	47K	5%	1/4W
R158	1-249-431-11	CARBON	15K	5%	1/4W
R159	1-249-417-11	CARBON	1K	5%	1/4W
R161	1-249-417-11	CARBON	1K	5%	1/4W
R163	1-249-417-11	CARBON	1K	5%	1/4W
R164	1-249-417-11	CARBON	1K	5%	1/4W
R201	1-249-409-11	CARBON	220	5%	1/4W
R203	1-249-417-11	CARBON	1K	5%	1/4W
R204	1-249-418-11	CARBON	1.2K	5%	1/4W
R205	1-249-419-11	CARBON	1.5K	5%	1/4W
R210	1-249-429-11	CARBON	10K	5%	1/4W
R211	1-247-843-11	CARBON	3.3K	5%	1/4W
R212	1-249-426-11	CARBON	5.6K	5%	1/4W
R213	1-249-417-11	CARBON	1K	5%	1/4W
R222	1-249-418-11	CARBON	1.2K	5%	1/4W
R223	1-249-419-11	CARBON	1.5K	5%	1/4W
R224	1-249-420-11	CARBON	1.8K	5%	1/4W
R225	1-249-422-11	CARBON	2.7K	5%	1/4W
R226	1-247-843-11	CARBON	3.3K	5%	1/4W
R227	1-249-426-11	CARBON	5.6K	5%	1/4W
R228	1-249-428-11	CARBON	8.2K	5%	1/4W
R229	1-249-432-11	CARBON	18K	5%	1/4W
R232	1-249-429-11	CARBON	10K	5%	1/4W
R233	1-249-429-11	CARBON	10K	5%	1/4W
R234	1-247-887-00	CARBON	220K	5%	1/4W
R235	1-247-887-00	CARBON	220K	5%	1/4W
R236	1-249-441-11	CARBON	100K	5%	1/4W
R237	1-247-887-00	CARBON	220K	5%	1/4W
R238	1-247-887-00	CARBON	220K	5%	1/4W
R239	1-249-441-11	CARBON	100K	5%	1/4W
R240	1-247-887-00	CARBON	220K	5%	1/4W
R304	1-249-420-11	CARBON	1.8K	5%	1/4W
R308	1-249-422-11	CARBON	2.7K	5%	1/4W
R310	1-249-417-11	CARBON	1K	5%	1/4W
R311	1-249-417-11	CARBON	1K	5%	1/4W
R312	1-249-417-11	CARBON	1K	5%	1/4W
R314	1-249-422-11	CARBON	2.7K	5%	1/4W
R315	1-249-422-11	CARBON	2.7K	5%	1/4W
R316	1-249-421-11	CARBON	2.2K	5%	1/4W
R317	1-249-419-11	CARBON	1.5K	5%	1/4W
R318	1-249-437-11	CARBON	47K	5%	1/4W

Ref. No.	Part No.	Description			Remark
R319	1-249-422-11	CARBON	2.7K	5%	1/4W
R320	1-249-422-11	CARBON	2.7K	5%	1/4W
R321	1-249-422-11	CARBON	2.7K	5%	1/4W
		< SWITCH >			
SW101	1-554-303-21	SWITCH, TACTILE (DISC 1)			
SW102	1-554-303-21	SWITCH, TACTILE (⏏)			
SW108	1-554-303-21	SWITCH, TACTILE (DISC 2)			
SW109	1-554-303-21	SWITCH, TACTILE (⏏)			
SW110	1-554-303-21	SWITCH, TACTILE (DISC 3)			
SW111	1-554-303-21	SWITCH, TACTILE (⏏)			
SW112	1-554-303-21	SWITCH, TACTILE (■, PGM CLEAR)			
SW113	1-554-303-21	SWITCH, TACTILE (◀▶, ENTER)			
SW114	1-554-303-21	SWITCH, TACTILE (❚❚, TUNER MEM)			
SW115	1-554-303-21	SWITCH, TACTILE (●, REC PAUSE/START)			
SW116	1-554-088-00	SWITCH, KEY BOARD (▶▶ ▶▶I, TUNING +)			
SW117	1-554-088-00	SWITCH, KEY BOARD (I◀◀ ◀◀, TUNING –)			
SW118	1-554-303-21	SWITCH, TACTILE (PLAY MODE, FM MODE/DIR)			
SW119	1-554-303-21	SWITCH, TACTILE (MD)			
SW120	1-554-303-21	SWITCH, TACTILE (TAPE)			
SW121	1-554-303-21	SWITCH, TACTILE (TUNER/BAND)			
SW122	1-554-303-21	SWITCH, TACTILE (CD/DISC SKIP)			
SW123	1-554-303-21	SWITCH, TACTILE (DISPLAY)			
SW124	1-554-303-21	SWITCH, TACTILE (PRESET –)			
SW125	1-554-303-21	SWITCH, TACTILE (PRESET +)			
		< VIEW FINDER DISPLAY >			
VFD1	1-518-852-11	INDICATOR TUBE, FLUORESCENT			
		< IC/VIBRATOR >			
X101	6-600-092-01	IC RPM7138-V4			
X102	1-795-436-11	VIBRATOR, CRYSTAL (4.19MHz)			
**********					
		HEADPHONE BOARD			
		**********			
		< JACK >			
JK201	1-815-813-11	JACK (LARGE TYPE) (PHONES)			
		< COIL >			
L301	1-410-525-11	INDUCTOR	220uH		
L302	1-410-525-11	INDUCTOR	220uH		
L303	1-410-501-11	INDUCTOR	2.2uH		
		< RESISTOR >			
R408	1-249-413-11	CARBON	470	5%	1/4W
R409	1-249-413-11	CARBON	470	5%	1/4W
**********					
	A-4730-428-A	MAIN BOARD, COMPLETE (US, CND, AUS)			
	A-4730-626-A	MAIN BOARD, COMPLETE (AEP, UK)			
		**********			
		< BAND-PASS FILTER >			
BP201	1-234-704-11	FILTER, BAND PASS (FM)			

MAIN

< CAPACITOR >

Ref. No.	Part No.	Description			Remark
C201	1-162-205-31	CERAMIC	18PF	5%	50V
C205	1-162-294-31	CERAMIC	0.001uF	10%	50V
C206	1-162-210-31	CERAMIC	30PF	5%	50V
C207	1-128-809-11	CERAMIC	100PF	5%	50V
C208	1-162-294-31	CERAMIC	0.001uF	10%	50V
C209	1-164-159-21	CERAMIC	0.1uF		50V
C210	1-164-159-21	CERAMIC	0.1uF		50V
C211	1-164-159-21	CERAMIC	0.1uF		50V
C213	1-162-294-31	CERAMIC	0.001uF	10%	50V
C214	1-162-203-31	CERAMIC	15PF	5%	50V
C215	1-162-294-31	CERAMIC	0.001uF	10%	50V
C216	1-127-876-21	CERAMIC	0.01uF	10%	50V
C217	1-162-294-31	CERAMIC	0.001uF	10%	50V
C218	1-102-936-00	CERAMIC	3.0PF	0.25PF	50V
C219	1-127-884-21	CERAMIC	0.047uF	10%	50V
C220	1-127-876-21	CERAMIC	0.01uF	10%	50V
C221	1-164-159-21	CERAMIC	0.1uF		50V
C223	1-164-159-21	CERAMIC	0.1uF		50V
C224	1-127-884-21	CERAMIC	0.047uF	10%	50V
C226	1-127-880-21	CERAMIC	0.022uF	10%	50V
C227	1-162-294-31	CERAMIC	0.001uF	10%	50V
C228	1-128-803-21	CERAMIC	33PF	5%	50V
C229	1-162-201-31	CERAMIC	12PF	5%	50V
C230	1-162-199-31	CERAMIC	10PF	5%	50V
C235	1-162-294-31	CERAMIC	0.001uF	10%	50V
C236	1-127-876-21	CERAMIC	0.01uF	10%	50V
C237	1-127-876-21	CERAMIC	0.01uF	10%	50V
C238	1-130-474-00	MYLAR	1800PF	5%	50V
C239	1-130-474-00	MYLAR	1800PF	5%	50V
C241	1-127-880-21	CERAMIC	0.022uF	10%	50V
C242	1-162-215-31	CERAMIC	47PF	5%	50V (AEP, UK)
C243	1-162-215-31	CERAMIC	47PF	5%	50V (AEP, UK)
C244	1-162-291-31	CERAMIC	560PF	10%	50V (AEP, UK)
C245	1-128-809-11	CERAMIC	100PF	5%	50V (AEP, UK)
C246	1-162-291-31	CERAMIC	560PF	10%	50V (AEP, UK)
C247	1-162-294-31	CERAMIC	0.001uF	10%	50V (AEP, UK)
C248	1-162-290-31	CERAMIC	470PF	10%	50V
C249	1-162-290-31	CERAMIC	470PF	10%	50V
C250	1-130-496-00	MYLAR	0.12uF	5%	50V
C251	1-130-496-00	MYLAR	0.12uF	5%	50V
C252	1-130-496-00	MYLAR	0.12uF	5%	50V
C253	1-130-496-00	MYLAR	0.12uF	5%	50V
C254	1-162-290-31	CERAMIC	470PF	10%	50V
C255	1-162-290-31	CERAMIC	470PF	10%	50V
C258	1-164-159-21	CERAMIC	0.1uF		50V
C259	1-162-294-31	CERAMIC	0.001uF	10%	50V
C260	1-162-294-31	CERAMIC	0.001uF	10%	50V
C261	1-130-476-00	MYLAR	0.0027uF	5%	50V
C262	1-130-476-00	MYLAR	0.0027uF	5%	50V
C263	1-130-471-00	MYLAR	0.001uF	5%	50V
C264	1-130-481-00	MYLAR	0.0068uF	5%	50V
C265	1-127-880-21	CERAMIC	0.022uF	10%	50V
C266	1-130-483-00	MYLAR	0.01uF	5%	50V
C267	1-162-294-31	CERAMIC	0.001uF	10%	50V
C268	1-130-488-00	MYLAR	0.027uF	5%	50V
C269	1-130-473-00	MYLAR	0.0015uF	5%	50V
C270	1-128-808-21	CERAMIC	82PF	5%	50V
C271	1-130-482-00	MYLAR	8200PF	5%	50V
C272	1-162-286-21	CERAMIC	220PF	10%	50V
C273	1-162-286-21	CERAMIC	220PF	10%	50V
C274	1-130-471-00	MYLAR	0.001uF	5%	50V
C275	1-130-471-00	MYLAR	0.001uF	5%	50V
C276	1-130-488-00	MYLAR	0.027uF	5%	50V
C277	1-164-159-21	CERAMIC	0.1uF		50V
C278	1-130-473-00	MYLAR	0.0015uF	5%	50V
C279	1-128-808-21	CERAMIC	82PF	5%	50V
C280	1-127-884-21	CERAMIC	0.047uF	10%	50V
C283	1-130-483-00	MYLAR	0.01uF	5%	50V
C284	1-162-294-31	CERAMIC	0.001uF	10%	50V
C285	1-128-809-11	CERAMIC	100PF	5%	50V
C286	1-128-809-11	CERAMIC	100PF	5%	50V
C287	1-164-159-21	CERAMIC	0.1uF		50V
C288	1-164-159-21	CERAMIC	0.1uF		50V
C289	1-164-159-21	CERAMIC	0.1uF		50V
C298	1-164-159-21	CERAMIC	0.1uF		50V
C299	1-164-159-21	CERAMIC	0.1uF		50V
C301	1-162-294-31	CERAMIC	0.001uF	10%	50V
C302	1-162-294-31	CERAMIC	0.001uF	10%	50V
C303	1-162-294-31	CERAMIC	0.001uF	10%	50V
C304	1-162-294-31	CERAMIC	0.001uF	10%	50V
C307	1-127-884-21	CERAMIC	0.047uF	10%	50V
C310	1-127-884-21	CERAMIC	0.047uF	10%	50V
C311	1-164-159-21	CERAMIC	0.1uF		50V
C312	1-162-294-31	CERAMIC	0.001uF	10%	50V
C313	1-127-876-21	CERAMIC	0.01uF	10%	50V
C314	1-162-290-31	CERAMIC	470PF	10%	50V
C315	1-162-290-31	CERAMIC	470PF	10%	50V
C316	1-164-159-21	CERAMIC	0.1uF		50V
C318	1-162-290-31	CERAMIC	470PF	10%	50V
C319	1-162-290-31	CERAMIC	470PF	10%	50V
C320	1-162-290-31	CERAMIC	470PF	10%	50V
C321	1-162-291-31	CERAMIC	560PF	10%	50V
C322	1-162-291-31	CERAMIC	560PF	10%	50V
C323	1-162-291-31	CERAMIC	560PF	10%	50V
C324	1-164-159-21	CERAMIC	0.1uF		50V
C325	1-164-159-21	CERAMIC	0.1uF		50V
CE201	1-126-963-11	ELECT	4.7uF	20%	50V
CE202	1-126-933-11	ELECT	100uF	20%	16V
CE203	1-126-961-11	ELECT	2.2uF	20%	50V
CE204	1-126-927-11	ELECT	2200uF	20%	10V
CE205	1-126-963-11	ELECT	4.7uF	20%	50V
CE207	1-126-963-11	ELECT	4.7uF	20%	50V
CE208	1-126-963-11	ELECT	4.7uF	20%	50V
CE209	1-126-933-11	ELECT	100uF	20%	16V
CE210	1-126-959-11	ELECT	0.47uF	20%	50V
CE211	1-126-957-11	ELECT	0.22uF	20%	50V
CE212	1-126-961-11	ELECT	2.2uF	20%	50V
CE213	1-126-964-11	ELECT	10uF	20%	50V

Ref. No.	Part No.	Description			Remark
CE214	1-126-961-11	ELECT	2.2uF	20%	50V (AEP, UK)
CE215	1-126-933-11	ELECT	100uF	20%	16V (AEP, UK)
CE216	1-126-963-11	ELECT	4.7uF	20%	50V
CE217	1-126-963-11	ELECT	4.7uF	20%	50V
CE218	1-126-961-11	ELECT	2.2uF	20%	50V
CE219	1-126-961-11	ELECT	2.2uF	20%	50V
CE220	1-126-960-11	ELECT	1uF	20%	50V
CE221	1-126-960-11	ELECT	1uF	20%	50V
CE222	1-126-934-11	ELECT	220uF	20%	16V
CE225	1-126-963-11	ELECT	4.7uF	20%	50V
CE227	1-126-933-11	ELECT	100uF	20%	16V
CE228	1-126-963-11	ELECT	4.7uF	20%	50V
CE229	1-126-963-11	ELECT	4.7uF	20%	50V
CE230	1-126-963-11	ELECT	4.7uF	20%	50V
CE231	1-126-961-11	ELECT	2.2uF	20%	50V
CE232	1-126-961-11	ELECT	2.2uF	20%	50V
CE233	1-126-963-11	ELECT	4.7uF	20%	50V
CE234	1-126-963-11	ELECT	4.7uF	20%	50V
CE235	1-126-964-11	ELECT	10uF	20%	50V
CE236	1-126-935-11	ELECT	470uF	20%	16V
CE238	1-126-961-11	ELECT	2.2uF	20%	50V
CE239	1-126-963-11	ELECT	4.7uF	20%	50V
CE240	1-126-959-11	ELECT	0.47uF	20%	50V
CE241	1-126-933-11	ELECT	100uF	20%	16V
CE242	1-126-933-11	ELECT	100uF	20%	16V
CE243	1-126-933-11	ELECT	100uF	20%	16V
CE244	1-126-961-11	ELECT	2.2uF	20%	50V
CE245	1-126-964-11	ELECT	10uF	20%	50V
CE246	1-126-961-11	ELECT	2.2uF	20%	50V
CE247	1-126-961-11	ELECT	2.2uF	20%	50V
CE249	1-126-967-11	ELECT	47uF	20%	50V
CE250	1-126-961-11	ELECT	2.2uF	20%	50V
CE251	1-126-967-11	ELECT	47uF	20%	50V
CE252	1-126-961-11	ELECT	2.2uF	20%	50V
CE253	1-126-933-11	ELECT	100uF	20%	16V
CE254	1-126-961-11	ELECT	2.2uF	20%	50V
CE255	1-126-967-11	ELECT	47uF	20%	50V
CE256	1-126-961-11	ELECT	2.2uF	20%	50V
CE258	1-126-935-11	ELECT	470uF	20%	16V
CE259	1-126-964-11	ELECT	10uF	20%	50V
CE260	1-126-961-11	ELECT	2.2uF	20%	50V
CE261	1-126-935-11	ELECT	470uF	20%	16V
CE262	1-126-933-11	ELECT	100uF	20%	16V
CE263	1-126-933-11	ELECT	100uF	20%	16V
CE264	1-126-962-11	ELECT	3.3uF	20%	50V
CE265	1-126-933-11	ELECT	100uF	20%	16V
CE267	1-126-935-11	ELECT	470uF	20%	16V
CE268	1-126-926-11	ELECT	1000uF	20%	10V
CE269	1-126-935-11	ELECT	470uF	20%	16V
CE270	1-126-964-11	ELECT	10uF	20%	50V
CE271	1-126-964-11	ELECT	10uF	20%	50V
CE272	1-126-926-11	ELECT	1000uF	20%	10V
CE273	1-126-933-11	ELECT	100uF	20%	16V
CE274	1-126-963-11	ELECT	4.7uF	20%	50V
CE275	1-126-963-11	ELECT	4.7uF	20%	50V
CE276	1-126-933-11	ELECT	100uF	20%	16V
CE277	1-126-933-11	ELECT	100uF	20%	16V
CE278	1-126-933-11	ELECT	100uF	20%	16V
CE280	1-126-963-11	ELECT	4.7uF	20%	50V
CE281	1-126-963-11	ELECT	4.7uF	20%	50V
CE283	1-126-961-11	ELECT	2.2uF	20%	50V
CE284	1-126-933-11	ELECT	100uF	20%	16V

< CERAMIC FILTER/VIBRATOR >

CF201	1-760-393-11	FILTER, CERAMIC
CF202	1-795-397-11	FILTER, CERAMIC
CF203	1-795-396-11	DISCRIMINATOR, CERAMIC
CF204	1-577-126-11	VIBRATOR, CRYSTAL (7.2MHz)
CF205	1-579-900-21	VIBRATOR, CRYSTAL (4.332MHz) (AEP, UK)

< CONNECTOR/JACK/IC >

CON201	1-694-848-11	TERMINAL BOARD (ANT FM) (FM ANT 75Ω COAXIAL) (AEP, UK)
CON201	1-815-968-11	CONNECTOR (F TYPE) (FM ANT 75Ω COAXIAL) (US, CND, AUS)
CON202	1-778-310-11	PLUG, CONNECTOR 2P (AM ANT)
* CON203	1-564-708-11	PIN, CONNECTOR (SMALL TYPE) 6P
CON204	1-774-727-11	JACK, PIN 2P (MD IN)
* CON205	1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P
* CON206	1-564-711-11	PIN, CONNECTOR (SMALL TYPE) 9P
* CON207	1-564-713-11	PIN, CONNECTOR (SMALL TYPE) 11P
* CON208	1-564-709-11	PIN, CONNECTOR (SMALL TYPE) 7P
* CON209	1-564-711-11	PIN, CONNECTOR (SMALL TYPE) 9P
* CON210	1-564-706-11	PIN, CONNECTOR (SMALL TYPE) 4P
* CON211	1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P
* CON212	1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P
CON213	1-564-707-11	PIN, CONNECTOR (SMALL TYPE) 5P
* CON214	1-564-706-11	PIN, CONNECTOR (SMALL TYPE) 4P
CON215	1-564-707-11	PIN, CONNECTOR (SMALL TYPE) 5P
* CON216	1-564-712-11	PIN, CONNECTOR (SMALL TYPE) 10P
* CON218	1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P
CON219	8-749-921-12	IC GP1F32T (DIGITAL OUT OPTICAL)

< DIODE >

D201	8-719-991-33	DIODE 1SS133T-77
D202	8-719-991-33	DIODE 1SS133T-77
D203	8-719-991-33	DIODE 1SS133T-77 (AEP, UK)
D204	8-719-991-33	DIODE 1SS133T-77
D205	8-719-991-33	DIODE 1SS133T-77
D206	8-719-991-33	DIODE 1SS133T-77
D207	8-719-991-33	DIODE 1SS133T-77
D210	8-719-991-33	DIODE 1SS133T-77
D211	8-719-991-33	DIODE 1SS133T-77
D212	8-719-200-02	DIODE 1N4001

< IC >

IC201	8-759-590-13	IC LC72131D
IC202	6-700-580-01	IC LA1823
IC203	8-759-557-36	IC BU1924F-E2 (AEP, UK)
IC204	8-759-266-23	IC BU4094
IC205	1-804-780-11	IC TA7291S (J)
IC206	1-804-780-11	IC TA7291S (J)
IC207	6-702-842-01	IC PT2314
IC208	8-759-939-73	IC BA3308
IC209	8-759-933-50	IC BA335

MAIN

Ref. No.	Part No.	Description			Remark
IC210	8-759-502-21	IC TDA2822M			
		< TRANSFORMER >			
IFT201	1-424-935-11	COIL (AM OSC)			
IFT202	1-424-936-11	COIL (AM ANT)			
IFT205	1-424-876-11	COIL (AM)			
		< COIL >			
L202	1-249-399-11	CARBON	33	5%	1/4W
L203	1-424-880-11	COIL (FM)			
L204	1-424-879-11	COIL (FM)			
L205	1-410-521-11	INDUCTOR	100uH		
L206	1-410-521-11	INDUCTOR	100uH		
L207	1-410-093-11	INDUCTOR	39mH		
L208	1-410-093-11	INDUCTOR	39mH		
L209	1-410-521-11	INDUCTOR	100uH		
L210	1-410-517-11	INDUCTOR	47uH		
		< DIODE/TRANSISTOR >			
Q201	8-719-085-35	DIODE SVC348T			
Q202	8-729-194-57	TRANSISTOR	2SC945TP-QP		
Q204	8-729-194-57	TRANSISTOR	2SC945TP-QP		
Q205	8-729-194-57	TRANSISTOR	2SC945TP-QP		
Q206	8-729-119-76	TRANSISTOR	2SA733TP-P		
Q207	8-729-194-57	TRANSISTOR	2SC945TP-QP		
Q208	8-729-823-13	TRANSISTOR	2SC2999D-SPA-AC		(AEP, UK)
Q209	8-729-119-76	TRANSISTOR	2SA733TP-P (AEP, UK)		
Q210	8-729-040-88	TRANSISTOR	2SB1240TV2QR		
Q211	8-729-194-57	TRANSISTOR	2SC945TP-QP		
Q215	8-729-194-57	TRANSISTOR	2SC945TP-QP		
Q216	8-729-116-82	TRANSISTOR	2SD1616-L		
Q217	8-729-194-57	TRANSISTOR	2SC945TP-QP		
Q218	8-729-040-88	TRANSISTOR	2SB1240TV2QR		
Q219	8-729-281-53	TRANSISTOR	2SC536NP-F		
Q220	8-729-905-50	TRANSISTOR	DTC343TS-TP		
Q221	8-729-119-76	TRANSISTOR	2SA733TP-P		
Q222	8-729-194-57	TRANSISTOR	2SC945TP-QP		
Q223	8-729-119-76	TRANSISTOR	2SA733TP-P		
Q224	8-729-194-57	TRANSISTOR	2SC945TP-QP		
Q225	8-729-194-57	TRANSISTOR	2SC945TP-QP		
Q226	8-729-194-57	TRANSISTOR	2SC945TP-QP		
Q227	8-729-438-33	TRANSISTOR	2SC1383-R		
Q228	8-729-281-53	TRANSISTOR	2SC536NP-F		
Q229	8-729-905-50	TRANSISTOR	DTC343TS-TP		
Q230	8-729-905-50	TRANSISTOR	DTC343TS-TP		
Q231	8-729-905-50	TRANSISTOR	DTC343TS-TP		
Q232	8-729-905-50	TRANSISTOR	DTC343TS-TP		
Q234	8-729-905-50	TRANSISTOR	DTC343TS-TP		
Q235	8-729-905-50	TRANSISTOR	DTC343TS-TP		
Q236	8-729-905-50	TRANSISTOR	DTC343TS-TP		
Q237	8-729-194-57	TRANSISTOR	2SC945TP-QP		
Q238	8-729-905-50	TRANSISTOR	DTC343TS-TP		
Q239	8-729-905-50	TRANSISTOR	DTC343TS-TP		
Q240	8-729-194-57	TRANSISTOR	2SC945TP-QP		
Q241	8-729-905-50	TRANSISTOR	DTC343TS-TP		
Q242	8-729-905-50	TRANSISTOR	DTC343TS-TP		
Q243	8-729-905-50	TRANSISTOR	DTC343TS-TP		

Ref. No.	Part No.	Description			Remark
Q245	8-729-905-50	TRANSISTOR	DTC343TS-TP		
Q246	8-729-905-50	TRANSISTOR	DTC343TS-TP		
Q247	8-729-905-50	TRANSISTOR	DTC343TS-TP		
Q248	8-729-194-57	TRANSISTOR	2SC945TP-QP		
Q249	8-729-194-57	TRANSISTOR	2SC945TP-QP		
Q250	8-729-194-57	TRANSISTOR	2SC945TP-QP		
Q251	8-729-194-57	TRANSISTOR	2SC945TP-QP		
Q252	8-729-823-13	TRANSISTOR	2SC2999D-SPA-AC		
Q253	8-729-905-50	TRANSISTOR	DTC343TS-TP		
Q254	8-729-905-50	TRANSISTOR	DTC343TS-TP		
Q255	8-729-905-50	TRANSISTOR	DTC343TS-TP		
Q256	8-729-905-50	TRANSISTOR	DTC343TS-TP		
		< RESISTOR >			
R7	1-249-441-11	CARBON	100K	5%	1/4W
R200	1-249-426-11	CARBON	5.6K	5%	1/4W
R201	1-249-441-11	CARBON	100K	5%	1/4W
R202	1-249-393-11	CARBON	10	5%	1/4W
R203	1-249-441-11	CARBON	100K	5%	1/4W
R211	1-249-429-11	CARBON	10K	5%	1/4W
R214	1-249-429-11	CARBON	10K	5%	1/4W
R215	1-249-429-11	CARBON	10K	5%	1/4W
R217	1-249-441-11	CARBON	100K	5%	1/4W
R218	1-249-435-11	CARBON	33K	5%	1/4W
R219	1-249-429-11	CARBON	10K	5%	1/4W
R220	1-249-425-11	CARBON	4.7K	5%	1/4W
R221	1-249-393-11	CARBON	10	5%	1/4W
R222	1-247-791-11	CARBON	22	5%	1/4W
R223	1-249-431-11	CARBON	15K	5%	1/4W
R226	1-249-418-11	CARBON	1.2K	5%	1/4W
R227	1-249-437-11	CARBON	47K	5%	1/4W
R228	1-249-437-11	CARBON	47K	5%	1/4W
R229	1-247-883-00	CARBON	150K	5%	1/4W
R230	1-249-418-11	CARBON	1.2K	5%	1/4W
R231	1-249-425-11	CARBON	4.7K	5%	1/4W
R232	1-247-843-11	CARBON	3.3K	5%	1/4W
R233	1-249-426-11	CARBON	5.6K	5%	1/4W
R234	1-249-421-11	CARBON	2.2K	5%	1/4W
R235	1-247-899-11	CARBON	680K	5%	1/4W (AEP, UK)
R236	1-247-807-31	CARBON	100	5%	1/4W
R237	1-249-429-11	CARBON	10K	5%	1/4W
R238	1-249-437-11	CARBON	47K	5%	1/4W
R239	1-249-417-11	CARBON	1K	5%	1/4W
R240	1-249-417-11	CARBON	1K	5%	1/4W
R241	1-247-862-11	CARBON	20K	5%	1/4W
R242	1-247-862-11	CARBON	20K	5%	1/4W
R243	1-249-437-11	CARBON	47K	5%	1/4W
R245	1-249-437-11	CARBON	47K	5%	1/4W
R247	1-247-843-11	CARBON	3.3K	5%	1/4W
R248	1-249-429-11	CARBON	10K	5%	1/4W
R249	1-249-429-11	CARBON	10K	5%	1/4W
R250	1-249-417-11	CARBON	1K	5%	1/4W
R251	1-249-429-11	CARBON	10K	5%	1/4W
R252	1-249-410-11	CARBON	270	5%	1/4W
R253	1-249-417-11	CARBON	1K	5%	1/4W
R254	1-249-429-11	CARBON	10K	5%	1/4W
R255	1-249-421-11	CARBON	2.2K	5%	1/4W

MAIN

Ref. No.	Part No.	Description			Remark
R256	1-249-421-11	CARBON	2.2K	5%	1/4W
R257	1-249-421-11	CARBON	2.2K	5%	1/4W
R258	1-249-425-11	CARBON	4.7K	5%	1/4W
R261	1-249-425-11	CARBON	4.7K	5%	1/4W (AEP, UK)
R262	1-249-430-11	CARBON	12K	5%	1/4W
R263	1-249-430-11	CARBON	12K	5%	1/4W
R264	1-249-425-11	CARBON	4.7K	5%	1/4W
R265	1-249-425-11	CARBON	4.7K	5%	1/4W
⚠R266	1-215-857-11	METAL OXIDE	10	5%	1W F
R267	1-249-417-11	CARBON	1K	5%	1/4W
R268	1-249-429-11	CARBON	10K	5%	1/4W
R269	1-249-429-11	CARBON	10K	5%	1/4W
R270	1-249-425-11	CARBON	4.7K	5%	1/4W
R271	1-247-854-11	CARBON	9.1K	5%	1/4W
R272	1-247-854-11	CARBON	9.1K	5%	1/4W
R273	1-249-421-11	CARBON	2.2K	5%	1/4W
R274	1-249-421-11	CARBON	2.2K	5%	1/4W
R275	1-249-437-11	CARBON	47K	5%	1/4W (AEP, UK)
R276	1-249-417-11	CARBON	1K	5%	1/4W (AEP, UK)
R277	1-247-891-00	CARBON	330K	5%	1/4W (AEP, UK)
R278	1-247-843-11	CARBON	3.3K	5%	1/4W (AEP, UK)
R279	1-249-401-11	CARBON	47	5%	1/4W (AEP, UK)
R280	1-249-419-11	CARBON	1.5K	5%	1/4W (AEP, UK)
R281	1-247-895-91	CARBON	470K	5%	1/4W (AEP, UK)
R282	1-249-429-11	CARBON	10K	5%	1/4W (AEP, UK)
R283	1-249-429-11	CARBON	10K	5%	1/4W (AEP, UK)
R284	1-249-426-11	CARBON	5.6K	5%	1/4W
R285	1-249-426-11	CARBON	5.6K	5%	1/4W
R290	1-249-425-11	CARBON	4.7K	5%	1/4W
R291	1-249-421-11	CARBON	2.2K	5%	1/4W
R292	1-249-429-11	CARBON	10K	5%	1/4W
R301	1-249-430-11	CARBON	12K	5%	1/4W
R302	1-249-430-11	CARBON	12K	5%	1/4W
R303	1-249-426-11	CARBON	5.6K	5%	1/4W
R304	1-249-426-11	CARBON	5.6K	5%	1/4W
R305	1-249-422-11	CARBON	2.7K	5%	1/4W
R306	1-249-422-11	CARBON	2.7K	5%	1/4W
R308	1-249-441-11	CARBON	100K	5%	1/4W
R309	1-249-430-11	CARBON	12K	5%	1/4W
R311	1-249-441-11	CARBON	100K	5%	1/4W
R312	1-249-417-11	CARBON	1K	5%	1/4W
R313	1-247-881-00	CARBON	120K	5%	1/4W
R314	1-249-429-11	CARBON	10K	5%	1/4W
R315	1-249-441-11	CARBON	100K	5%	1/4W
R316	1-249-433-11	CARBON	22K	5%	1/4W
R317	1-249-433-11	CARBON	22K	5%	1/4W
R318	1-249-433-11	CARBON	22K	5%	1/4W
R319	1-249-433-11	CARBON	22K	5%	1/4W
R320	1-249-433-11	CARBON	22K	5%	1/4W
R321	1-249-433-11	CARBON	22K	5%	1/4W
R323	1-249-426-11	CARBON	5.6K	5%	1/4W
R324	1-249-441-11	CARBON	100K	5%	1/4W
R325	1-249-401-11	CARBON	47	5%	1/4W
R326	1-249-417-11	CARBON	1K	5%	1/4W
R327	1-249-433-11	CARBON	22K	5%	1/4W
R328	1-249-430-11	CARBON	12K	5%	1/4W
R329	1-249-429-11	CARBON	10K	5%	1/4W
R330	1-249-429-11	CARBON	10K	5%	1/4W
R331	1-249-421-11	CARBON	2.2K	5%	1/4W
R332	1-249-429-11	CARBON	10K	5%	1/4W
R333	1-249-433-11	CARBON	22K	5%	1/4W
R334	1-249-429-11	CARBON	10K	5%	1/4W
R335	1-249-429-11	CARBON	10K	5%	1/4W
R336	1-249-429-11	CARBON	10K	5%	1/4W
R337	1-249-429-11	CARBON	10K	5%	1/4W
R338	1-249-417-11	CARBON	1K	5%	1/4W
R340	1-249-393-11	CARBON	10	5%	1/4W
R341	1-249-433-11	CARBON	22K	5%	1/4W
R342	1-249-421-11	CARBON	2.2K	5%	1/4W
R343	1-249-421-11	CARBON	2.2K	5%	1/4W
R344	1-249-427-11	CARBON	6.8K	5%	1/4W
R345	1-249-436-11	CARBON	39K	5%	1/4W
R346	1-249-399-11	CARBON	33	5%	1/4W
R347	1-247-881-00	CARBON	120K	5%	1/4W
R348	1-249-431-11	CARBON	15K	5%	1/4W
R349	1-247-903-00	CARBON	1M	5%	1/4W
R350	1-249-427-11	CARBON	6.8K	5%	1/4W
R351	1-249-437-11	CARBON	47K	5%	1/4W
R352	1-249-429-11	CARBON	10K	5%	1/4W
R353	1-249-437-11	CARBON	47K	5%	1/4W
R354	1-249-437-11	CARBON	47K	5%	1/4W
R355	1-249-437-11	CARBON	47K	5%	1/4W
R356	1-249-429-11	CARBON	10K	5%	1/4W
R357	1-249-426-11	CARBON	5.6K	5%	1/4W
R358	1-249-433-11	CARBON	22K	5%	1/4W
R359	1-249-424-11	CARBON	3.9K	5%	1/4W
R360	1-249-429-11	CARBON	10K	5%	1/4W
R361	1-249-426-11	CARBON	5.6K	5%	1/4W
R362	1-249-433-11	CARBON	22K	5%	1/4W
R363	1-249-429-11	CARBON	10K	5%	1/4W
R364	1-249-424-11	CARBON	3.9K	5%	1/4W
R365	1-249-427-11	CARBON	6.8K	5%	1/4W
R366	1-247-881-00	CARBON	120K	5%	1/4W
R367	1-249-437-11	CARBON	47K	5%	1/4W
R368	1-247-887-00	CARBON	220K	5%	1/4W
R369	1-247-887-00	CARBON	220K	5%	1/4W
R370	1-249-399-11	CARBON	33	5%	1/4W
R371	1-249-436-11	CARBON	39K	5%	1/4W
R372	1-249-427-11	CARBON	6.8K	5%	1/4W
R373	1-249-440-11	CARBON	82K	5%	1/4W
R374	1-249-409-11	CARBON	220	5%	1/4W
R375	1-247-842-11	CARBON	3K	5%	1/4W
R376	1-247-842-11	CARBON	3K	5%	1/4W
R377	1-249-439-11	CARBON	68K	5%	1/4W
R378	1-249-439-11	CARBON	68K	5%	1/4W
R380	1-249-431-11	CARBON	15K	5%	1/4W
R381	1-249-409-11	CARBON	220	5%	1/4W

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MAIN | POWER AMP | REGULATOR

Ref. No.	Part No.	Description			Remark
R382	1-249-429-11	CARBON	10K	5%	1/4W
R383	1-249-429-11	CARBON	10K	5%	1/4W
R384	1-249-417-11	CARBON	1K	5%	1/4W
R385	1-249-417-11	CARBON	1K	5%	1/4W
R386	1-249-429-11	CARBON	10K	5%	1/4W
R387	1-249-429-11	CARBON	10K	5%	1/4W
R388	1-249-433-11	CARBON	22K	5%	1/4W
R389	1-249-429-11	CARBON	10K	5%	1/4W
R390	1-249-429-11	CARBON	10K	5%	1/4W
R391	1-249-429-11	CARBON	10K	5%	1/4W
R392	1-249-429-11	CARBON	10K	5%	1/4W
R393	1-249-429-11	CARBON	10K	5%	1/4W
R394	1-249-429-11	CARBON	10K	5%	1/4W
R395	1-249-429-11	CARBON	10K	5%	1/4W
R396	1-249-429-11	CARBON	10K	5%	1/4W
⚠R397	1-215-857-11	METAL OXIDE	10	5%	1W F
R398	1-249-429-11	CARBON	10K	5%	1/4W
R401	1-249-435-11	CARBON	33K	5%	1/4W
R402	1-249-436-11	CARBON	39K	5%	1/4W
R403	1-249-436-11	CARBON	39K	5%	1/4W
R404	1-249-435-11	CARBON	33K	5%	1/4W
R405	1-249-421-11	CARBON	2.2K	5%	1/4W
R406	1-247-843-11	CARBON	3.3K	5%	1/4W
R407	1-247-843-11	CARBON	3.3K	5%	1/4W
R410	1-249-403-11	CARBON	68	5%	1/4W
R411	1-249-421-11	CARBON	2.2K	5%	1/4W
R412	1-249-424-11	CARBON	3.9K	5%	1/4W
R419	1-249-433-11	CARBON	22K	5%	1/4W
		< COIL >			
T201	1-456-181-11	COIL (OSCILLATION)			
		< TRIMMER/DIODE >			
VC202	1-141-410-11	CAP, ADJ			
VC203	8-719-070-77	DIODE SVC201SPA-M1-AC			
VC204	8-719-070-77	DIODE SVC201SPA-M1-AC			
VC205	1-141-410-11	CAP, ADJ			
		< DIODE >			
Z201	8-719-109-89	DIODE MTZJ-T-72-5.6B			
Z202	8-719-109-93	DIODE MTZJ-T-72-6.2B			
Z203	8-719-109-89	DIODE MTZJ-T-72-5.6B			
Z204	8-719-929-15	DIODE MTZJ-T-72-9.1B			
**********					
	A-4730-429-A	POWER AMP BOARD, COMPLETE			
		**********			
	7-685-645-14	SCREW +BVTP 3X6 TYPE2 SLIT			
	7-685-646-14	SCREW +BVTP 3X8 TYPE2 SLIT			
	7-685-648-14	SCREW +BVTP 3X12 TYPE2 SLIT			
		< CAPACITOR >			
C624	1-164-159-21	CERAMIC	0.1uF		50V
C700	1-128-818-21	CERAMIC	560PF	5%	50V
C701	1-128-818-21	CERAMIC	560PF	5%	50V
C702	1-162-282-31	CERAMIC	100PF	10%	50V
C703	1-162-282-31	CERAMIC	100PF	10%	50V

Ref. No.	Part No.	Description			Remark
C704	1-130-495-00	MYLAR	0.1uF	5%	50V
C705	1-130-495-00	MYLAR	0.1uF	5%	50V
CE619	1-104-666-11	ELECT	220uF	20%	25V
CE700	1-126-964-11	ELECT	10uF	20%	50V
CE701	1-126-964-11	ELECT	10uF	20%	50V
CE702	1-126-933-11	ELECT	100uF	20%	16V
CE703	1-126-933-11	ELECT	100uF	20%	16V
CE704	1-104-665-11	ELECT	100uF	20%	25V
CE705	1-104-665-11	ELECT	100uF	20%	25V
CE707	1-126-943-11	ELECT	2200uF	20%	25V
CE708	1-126-943-11	ELECT	2200uF	20%	25V
CE709	1-126-971-11	ELECT	470uF	20%	50V
CE710	1-104-666-11	ELECT	220uF	20%	25V
CE711	1-126-967-11	ELECT	47uF	20%	50V
CE712	1-104-666-11	ELECT	220uF	20%	25V
		< TRANSISTOR >			
Q701	8-729-905-50	TRANSISTOR	DTC343TS-TP		
Q702	8-729-905-50	TRANSISTOR	DTC343TS-TP		
Q703	8-729-905-50	TRANSISTOR	DTC343TS-TP		
Q704	8-729-905-50	TRANSISTOR	DTC343TS-TP		
		< RESISTOR >			
R634	1-249-406-11	CARBON	120	5%	1/4W
R635	1-249-406-11	CARBON	120	5%	1/4W
R700	1-249-421-11	CARBON	2.2K	5%	1/4W
R701	1-249-421-11	CARBON	2.2K	5%	1/4W
R702	1-249-437-11	CARBON	47K	5%	1/4W
R703	1-249-437-11	CARBON	47K	5%	1/4W
R704	1-249-417-11	CARBON	1K	5%	1/4W
R705	1-249-437-11	CARBON	47K	5%	1/4W
R706	1-249-389-11	CARBON	4.7	5%	1/4W
R707	1-249-389-11	CARBON	4.7	5%	1/4W
R708	1-249-419-11	CARBON	1.5K	5%	1/4W
R709	1-249-419-11	CARBON	1.5K	5%	1/4W
R710	1-249-429-11	CARBON	10K	5%	1/4W
R711	1-249-422-11	CARBON	2.7K	5%	1/4W
R712	1-249-422-11	CARBON	2.7K	5%	1/4W
		< IC >			
U1	8-759-391-71	IC LA4450			
U700	8-759-701-59	IC NJM7809FA			
**********					
	A-4730-430-A	REGULATOR BOARD, COMPLETE (US, CND)			
	A-4730-624-A	REGULATOR BOARD, COMPLETE (AEP, UK, AUS)			
		**********			
	1-533-217-31	HOLDER, FUSE			
		< CAPACITOR >			
C800	1-164-159-21	CERAMIC	0.1uF		50V
⚠C801	1-113-925-11	CERAMIC	0.01uF	20%	250V
C806	1-102-129-00	CERAMIC	10000PF	10%	50V
C807	1-102-129-00	CERAMIC	10000PF	10%	50V
C808	1-102-129-00	CERAMIC	10000PF	10%	50V
C809	1-102-129-00	CERAMIC	10000PF	10%	50V
C812	1-102-129-00	CERAMIC	10000PF	10%	50V
C821	1-164-159-21	CERAMIC	0.1uF		50V

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REGULATOR

Ref. No.	Part No.	Description			Remark
⚠C824	1-117-698-11	CERAMIC	680PF	10%	250V
C832	1-102-129-00	CERAMIC	10000PF	10%	50V
C833	1-102-129-00	CERAMIC	10000PF	10%	50V
C834	1-102-129-00	CERAMIC	10000PF	10%	50V
C838	1-164-159-21	CERAMIC	0.1uF		50V
C839	1-164-159-21	CERAMIC	0.1uF		50V
C840	1-102-129-00	CERAMIC	10000PF	10%	50V
C841	1-102-129-00	CERAMIC	10000PF	10%	50V
C847	1-102-129-00	CERAMIC	10000PF	10%	50V
C848	1-164-159-21	CERAMIC	0.1uF		50V
C849	1-164-159-21	CERAMIC	0.1uF		50V
C851	1-164-159-21	CERAMIC	0.1uF		50V
C852	1-164-159-21	CERAMIC	0.1uF		50V
C853	1-162-282-31	CERAMIC	100PF	10%	50V
CE802	1-126-943-11	ELECT	2200uF	20%	25V
CE803	1-126-968-11	ELECT	100uF	20%	50V
CE804	1-126-935-11	ELECT	470uF	20%	16V
CE806	1-126-933-11	ELECT	100uF	20%	16V
CE807	1-126-933-11	ELECT	100uF	20%	16V
CE811	1-126-968-11	ELECT	100uF	20%	50V
CE814	1-126-933-11	ELECT	100uF	20%	16V
CE815	1-126-933-11	ELECT	100uF	20%	16V
CE830	1-126-974-11	ELECT	3300uF	20%	50V
CE831	1-126-964-11	ELECT	10uF	20%	50V
CE833	1-126-960-11	ELECT	1uF	20%	50V
CE834	1-126-967-11	ELECT	47uF	20%	50V
CE836	1-126-942-61	ELECT	1000uF	20%	25V
CE838	1-126-933-11	ELECT	100uF	20%	16V
		< CONNECTOR >			
* CON801	1-569-596-11	PLUG, CONNECTOR (2.5mm) 3P			
* CON806	1-564-711-11	PIN, CONNECTOR (SMALL TYPE) 9P			
* CON808	1-564-104-00	PIN, CONNECTOR (3.96mm PITCH) 3P			
* CON809	1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P			
* CON810	1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P			
		< DIODE >			
D800	8-719-991-33	DIODE 1N4148TP			
D801	8-719-200-02	DIODE 1N4001			
D802	8-719-077-63	DIODE 1N5402			
D803	8-719-077-63	DIODE 1N5402			
D804	8-719-077-63	DIODE 1N5402			
D805	8-719-077-63	DIODE 1N5402			
D806	8-719-200-02	DIODE 1N4001			
D807	8-719-200-02	DIODE 1N4001			
D808	8-719-200-02	DIODE 1N4001			
D809	8-719-200-02	DIODE 1N4001			
D810	8-719-200-02	DIODE 1N4001			
D811	8-719-200-02	DIODE 1N4001			
D812	8-719-200-02	DIODE 1N4001			
D813	8-719-200-02	DIODE 1N4001			
D816	8-719-200-02	DIODE 1N4001			
D820	8-719-109-89	DIODE MTZJ-T-72-5.6B			
D823	8-719-947-13	DIODE MTZJ-T-72-4.7B			
D824	8-759-983-75	DIODE MTZJ-T-72-27			
D830	8-719-991-33	DIODE 1N4148TP			
D831	8-719-200-02	DIODE 1N4001			

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

SPEAKER JACK

Ref. No.	Part No.	Description			Remark
D832	8-719-109-85	DIODE MTZJ-T-72-5.1B			
D833	8-719-991-33	DIODE 1N4148TP			
D834	8-719-991-33	DIODE 1N4148TP			
D836	8-719-200-02	DIODE 1N4001			
D837	8-719-991-33	DIODE 1N4148TP			
		< COIL >			
⚠L801	1-424-944-11	INDUCTOR	400uH		
L802	1-410-093-11	INDUCTOR	39mH		
		< TRANSISTOR/IC >			
Q801	8-729-194-57	TRANSISTOR	2SC945TP-QP		
Q802	8-729-040-88	TRANSISTOR	2SB1240TV2QR		
Q809	8-729-194-57	TRANSISTOR	2SC945TP-QP		
Q821	8-729-438-33	TRANSISTOR	2SC1383-R		
Q822	8-759-971-11	IC PST529D			
		< RESISTOR >			
R804	1-249-417-11	CARBON	1K	5%	1/4W
R805	1-249-429-11	CARBON	10K	5%	1/4W
R809	1-249-417-11	CARBON	1K	5%	1/4W
R812	1-249-381-11	CARBON	1	5%	1/4W
R813	1-249-381-11	CARBON	1	5%	1/4W
R814	1-249-401-11	CARBON	47	5%	1/4W
R817	1-249-433-11	CARBON	22K	5%	1/4W
R823	1-249-409-11	CARBON	220	5%	1/4W
R824	1-249-429-11	CARBON	10K	5%	1/4W
R825	1-249-411-11	CARBON	330	5%	1/4W
R826	1-249-411-11	CARBON	330	5%	1/4W
R827	1-249-429-11	CARBON	10K	5%	1/4W
R834	1-249-413-11	CARBON	470	5%	1/4W
R835	1-249-400-11	CARBON	39	5%	1/4W
R836	1-249-433-11	CARBON	22K	5%	1/4W
R837	1-249-424-11	CARBON	3.9K	5%	1/4W
R839	1-249-424-11	CARBON	3.9K	5%	1/4W
⚠R841	1-219-237-91	SOLID	3.3M	20%	1/2W (US, CND)
R842	1-249-429-11	CARBON	10K	5%	1/4W
R843	1-249-417-11	CARBON	1K	5%	1/4W
R844	1-247-807-31	CARBON	100	5%	1/4W
		< RELAY >			
⚠REL801	1-755-446-11	RELAY (AEP, UK, AUS)			
⚠REL801	1-755-448-11	RELAY (US, CND)			
		< TRANSFORMER>			
⚠TR801	1-437-956-11	TRANSFORMER, POWER (US, CND)			
⚠TR801	1-437-958-11	TRANSFORMER, POWER (AEP, UK, AUS)			
		< IC >			
U802	8-759-231-58	IC NJM7812A			

****

SPEAKER JACK BOARD

****

< CONNECTOR >

* CON800	1-564-215-11	PIN, CONNECTOR (3.96mm PITCH) 4P	

SPEAKER JACK | SWITCH | VOL KEY

Ref. No.	Part No.	Description			Remark
		< TERMINAL BOARD >			
* SP801	1-537-240-21	TERMINAL BOARD (CHECKER IN) (SPEAKER (IMPEDANCE USE 4Ω))			
**********					
		SWITCH BOARD			
		**********			
		< SWITCH >			
SW901	1-553-577-21	SWITCH, MICRO (CD MECHANISM PROTECT)			
**********					
		VOL KEY BOARD			
		**********			
		< CAPACITOR >			
C201	1-162-294-31	CERAMIC	0.001uF	10%	50V
C202	1-162-294-31	CERAMIC	0.001uF	10%	50V
		< CONNECTOR >			
* CON109	1-564-708-11	PIN, CONNECTOR (SMALL TYPE) 6P			
		< LED >			
LED101	8-719-941-07	LED SLC-22VR3 (STANDBY)			
		< TRANSISTOR >			
Q103	8-729-173-38	TRANSISTOR	2SA608SP-G		
		< RESISTOR/ENCODER >			
R110	1-249-427-11	CARBON	6.8K	5%	1/4W
R111	1-249-409-11	CARBON	220	5%	1/4W
R123	1-249-426-11	CARBON	5.6K	5%	1/4W
R124	1-249-422-11	CARBON	2.7K	5%	1/4W
R160	1-247-848-11	CARBON	5.1K	5%	1/4W
R214	1-249-429-11	CARBON	10K	5%	1/4W
R215	1-249-429-11	CARBON	10K	5%	1/4W
R216	1-476-916-11	ENCODER (VOLUME)			
		< SWITCH >			
SW103	1-554-303-21	SWITCH, TACTILE (I/⏻)			
SW104	1-554-303-21	SWITCH, TACTILE (MEGA BASS)			
SW105	1-554-303-21	SWITCH, TACTILE (MUSIC MENU)			
		< DIODE >			
Z201	8-719-109-85	DIODE MTZJ-T-72-5.1B			
**********					

Ref. No.	Part No.	Description	Remark
		MISCELLANEOUS	
		**********	
6	1-500-712-11	CORE, FERRITE	
103	1-796-544-11	DECK, MECH (CRL4349)	
152	1-176-636-11	PC BOARD ASSY	
⚠157	1-555-750-00	CORD, POWER (AEP)	
⚠157	1-696-535-11	CORD, POWER (UK)	
⚠157	1-696-966-31	CORD, POWER (AUS)	
⚠157	1-783-820-11	CORD, POWER (US, CND)	
158	1-823-170-11	CORD (WITH CONNECTOR) (FM ANT)	(AEP, UK)
160	1-500-712-11	CORE, FERRITE	
204	1-796-542-11	MECHANICAL, CD (CMCJ-0132)	
⚠F803	1-533-296-11	FUSE, GLASS CYLINDRICAL (DIA.5) (2A/125V)	(US, CND)
⚠F803	1-533-468-11	FUSE, GLASS TUBE (DIA.5) (2A/250V)	(AEP, UK, AUS)
⚠F804	1-533-419-11	FUSE, GLASS CYLINDRICAL (DIA.5) (4A/125V)	(US, CND)
⚠F804	1-533-471-11	FUSE, GLASS TUBE (DIA.5) (4A/250V)	(AEP, UK AUS)
⚠TR800	1-437-955-11	TRANSFORMER, POWER (US, CND)	
⚠TR800	1-437-957-11	TRANSFORMER, POWER (AEP, UK, AUS)	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

HCD-EP707

SONY

SERVICE MANUAL

Ver 1.3 2003.03

US Model
Canadian Model
AEP Model
UK Model
Australian Model

SUPPLEMENT-1

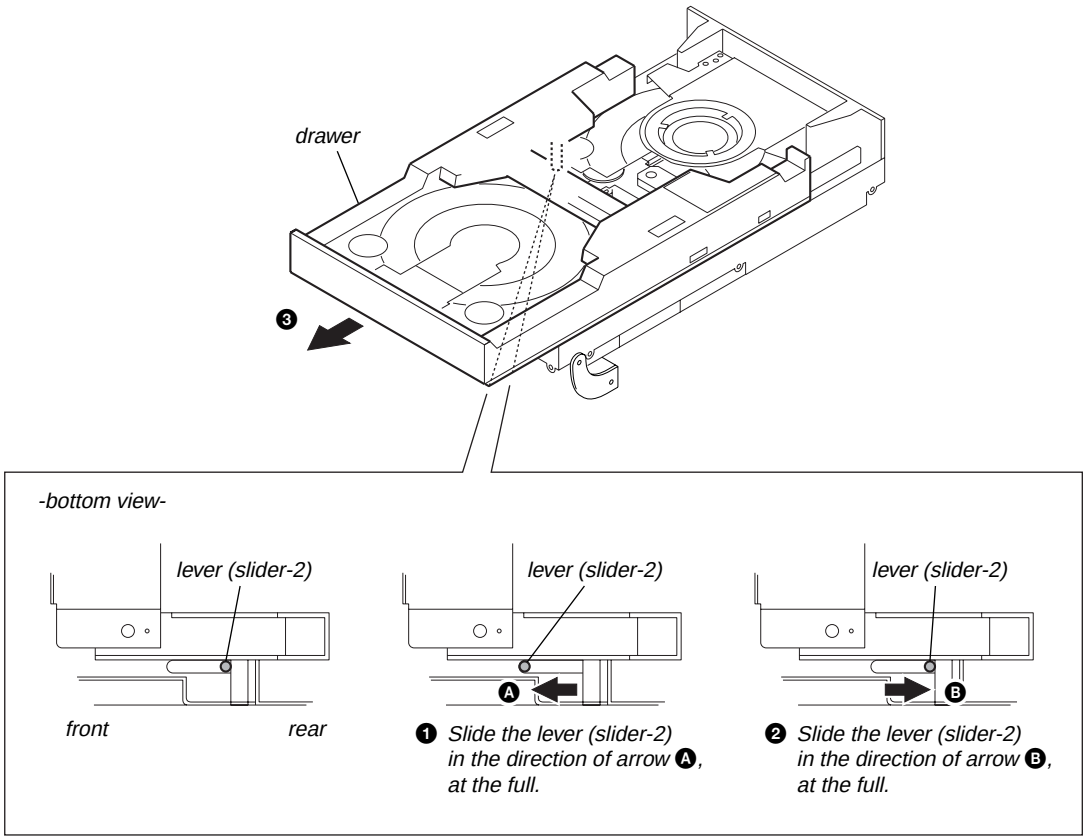
File this supplement with the service manual.

Subject: Addition of "DISASSEMBLY" and "ASSEMBLY" of CD Mechanism deck

(SPM-03006)

1. SERVICING NOTES

After assembling the CD mechanism deck, check that the drawer can be operated as shown in the figure below.

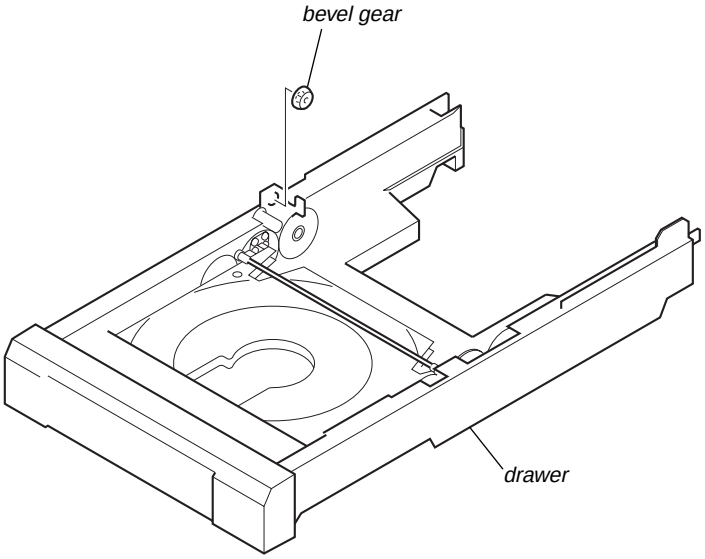


2. DISASSEMBLY

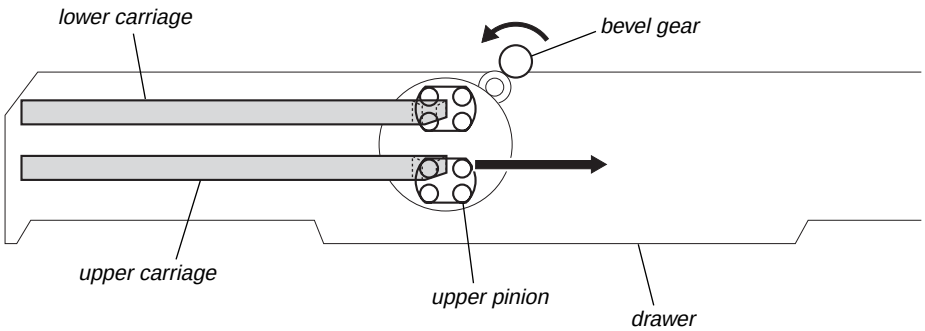
3-14. CARRIAGE

❶ *After taking out drawer from chassis, overturn the drawer and place on a jig, to prevent scratches on the drawer.*

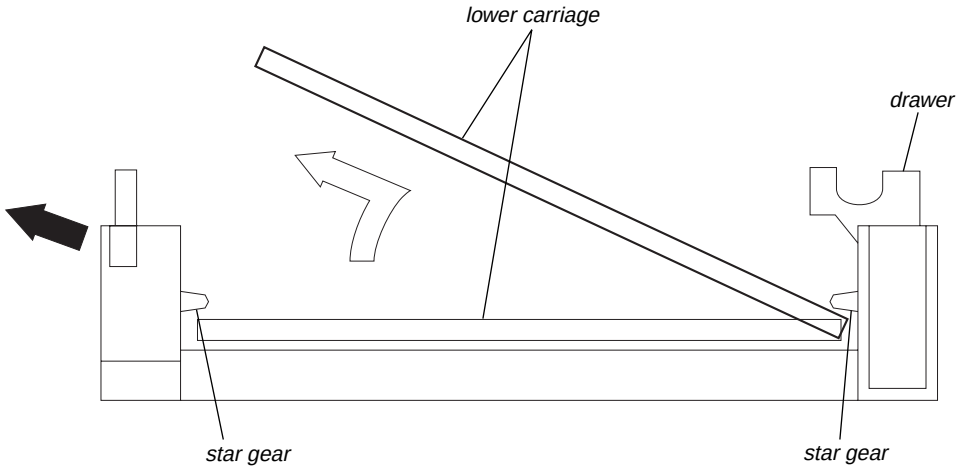
❷ *On the left hand side of the drawer, has a gear call the bevel gear.*
Make sure after taking out drawer from the chassis, this gear is still attached to the drawer.
If not, please refer to the picture below and fix back the bevel gear.



❸ *Using the left hand thumb and place on the bevel gear and the other hand holding the drawer.*
❹ *By turning the bevel gear anti clockwise direction, this gear turning will cause the upper pinion to turn.*
The result, it will cause the upper carriage to move out in the direction as shown in the picture below.

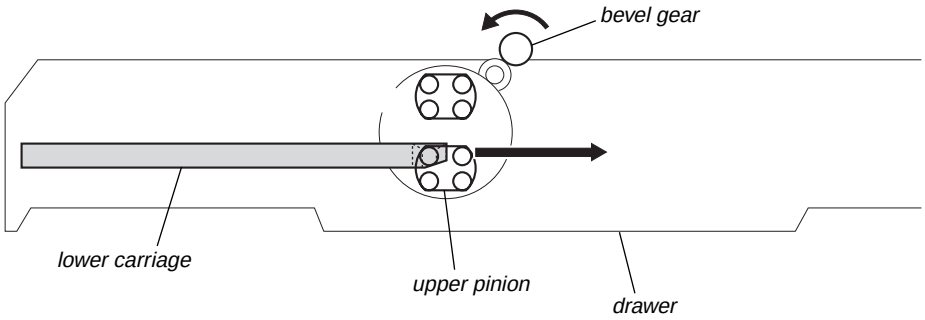


❺ *When bevel gear is turned anti clockwise, the upper pinion will in also turn 5 times.*
When the upper pinion turns, it will transport the upper carriage out from its original position.
When the upper carriage moves to it's max position (upper pinion turns 5 times) the lower carriage will drop down next.
Carriage up/down is controlled by this part called star gear.
From here, the upper carriage can be taken out. Method as shown below in the picture.



– back view –

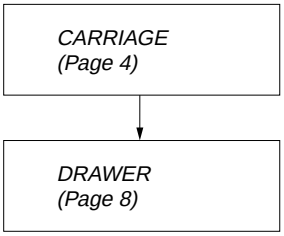
❻ *Next to take out the lower carriage. The bevel gear is turned anti clockwise.*
The lower pinion will turn 5 times. After turning the front star gear will turn slightly.
After finishing, next the upper pinion will turn 5 times.
While it turns, it will transport the lower carriage out to its max position.
From there, the carriage is taken out the same way as how the upper carriage is taken out.



3. ASSEMBLY

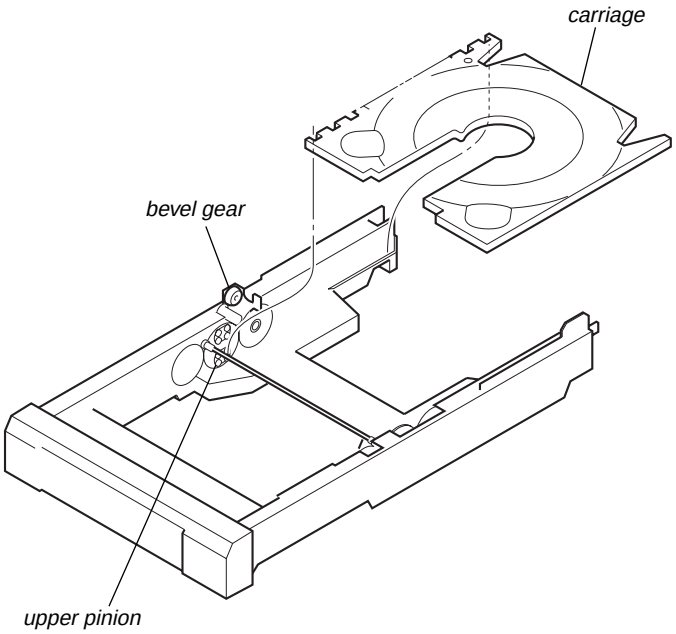
• This set can be assembled in the order shown below.

1. ASSEMBLY FLOW

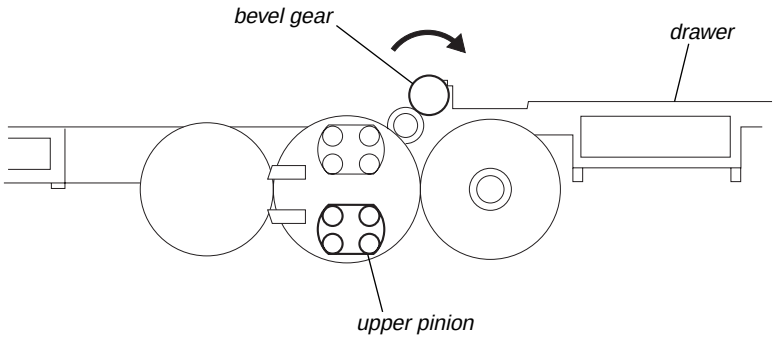


Note: Follow the assembly procedure in the numerical order given.

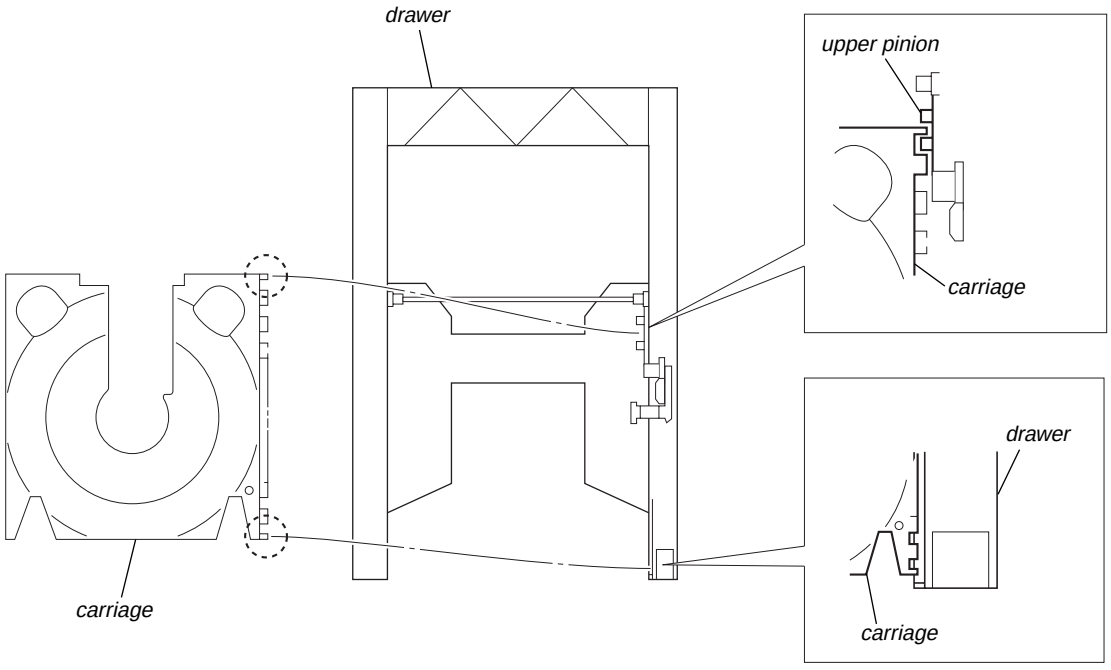
2. CARRIAGE



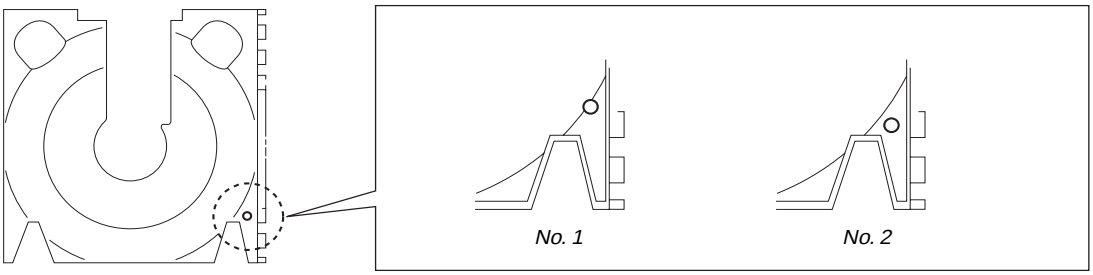
❶ *Before assembling back carriage to the drawer, make sure that the bevel gear is not missing and properly fixed.*
❷ *After assembling the bevel gear, turn the bevel gear in clockwise direction and turn it until the upper pinion starts to turn.*



❸ *Place the carriage (overturn) numbering facing downward, at the tip of the drawer with the first teeth of the carriage inside the support.*

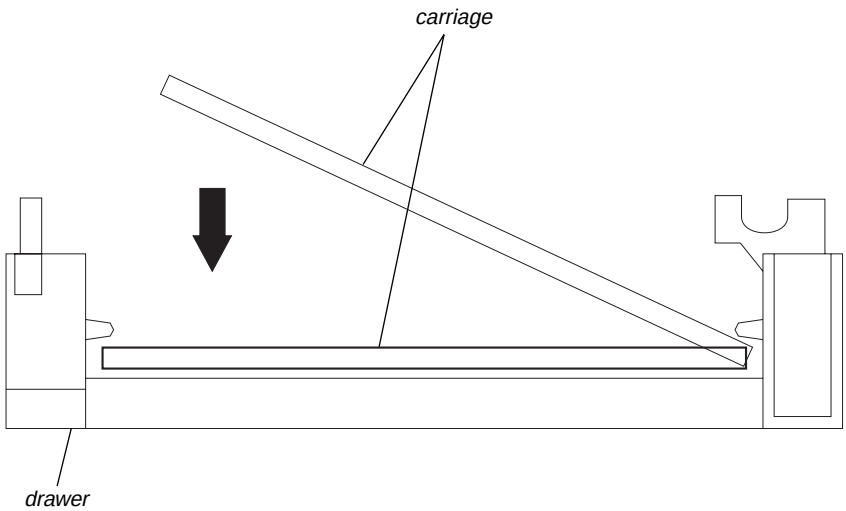


• **Differentiate Carriage Cavities**



Note: Carriage having two punches is cavity No. 3.

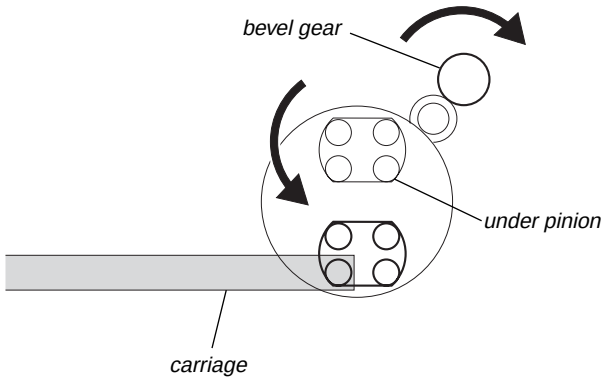
❹ *When placing the carriage into the drawer, make sure the carriage is fixed underneath the star gear and the last teeth into the front teeth of the upper pinion.*
After confirming position, the other side of the carriage will have to be pressed down (RHS) underneath the other side of the star gear.



❺ *Turn the bevel gear in a clockwise direction and the carriage will move to the back of the drawer. Pinion will turn 5 times.*

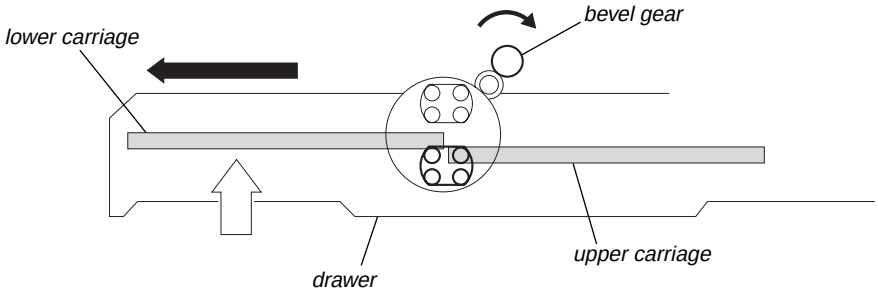
❻ *After the carriage reaches to the back of the drawer, the front star gear will turn slightly, after that, the lower pinion will turn 5 times. After that, the back star gear will turn slightly and lift the carriage up. (Help is needed to push the carriage upwards by hand)*

Note: The other piece of carriage must be place on the drawer, same as the first process, before the upper pinion starts to turn.



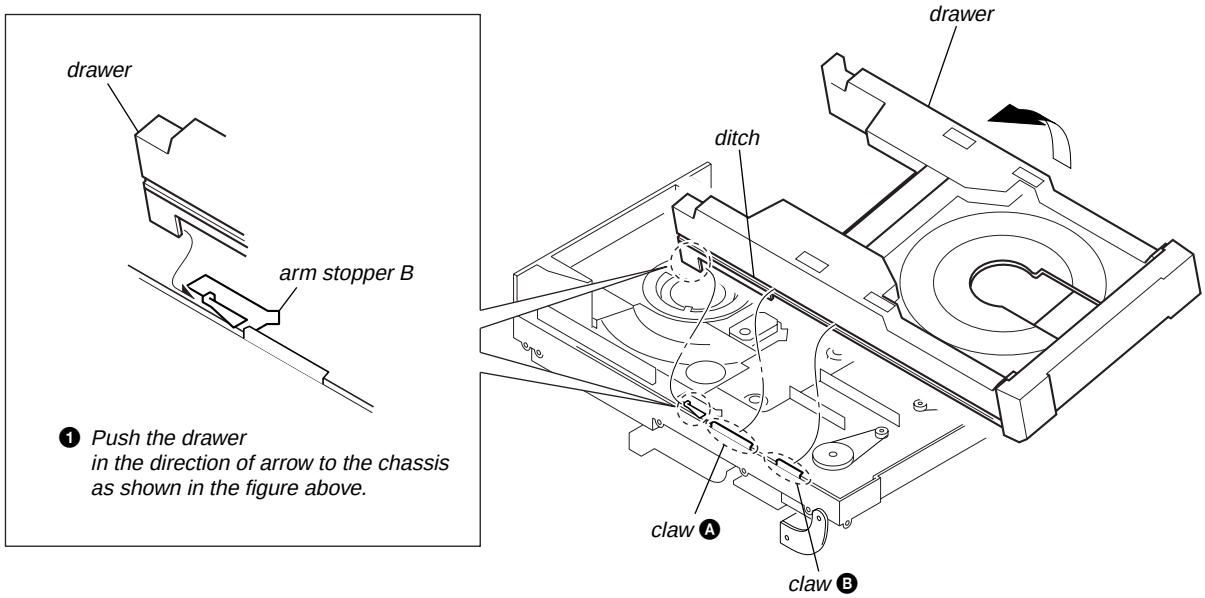
❼ *Place the next piece of carriage with the same way as the first piece of carriage is done.*

❽ *Turn the bevel gear in clockwise direction and the 2nd piece of carriage will move in. Before the next carriage is placed onto the drwar, the first carriage must be pushed up by hand.*



❾ *After fully turning the bevel gear, make sure that both carriages must align with each other. If both carriages do not match, that means the assembly is wrong.*

3. DRAWER

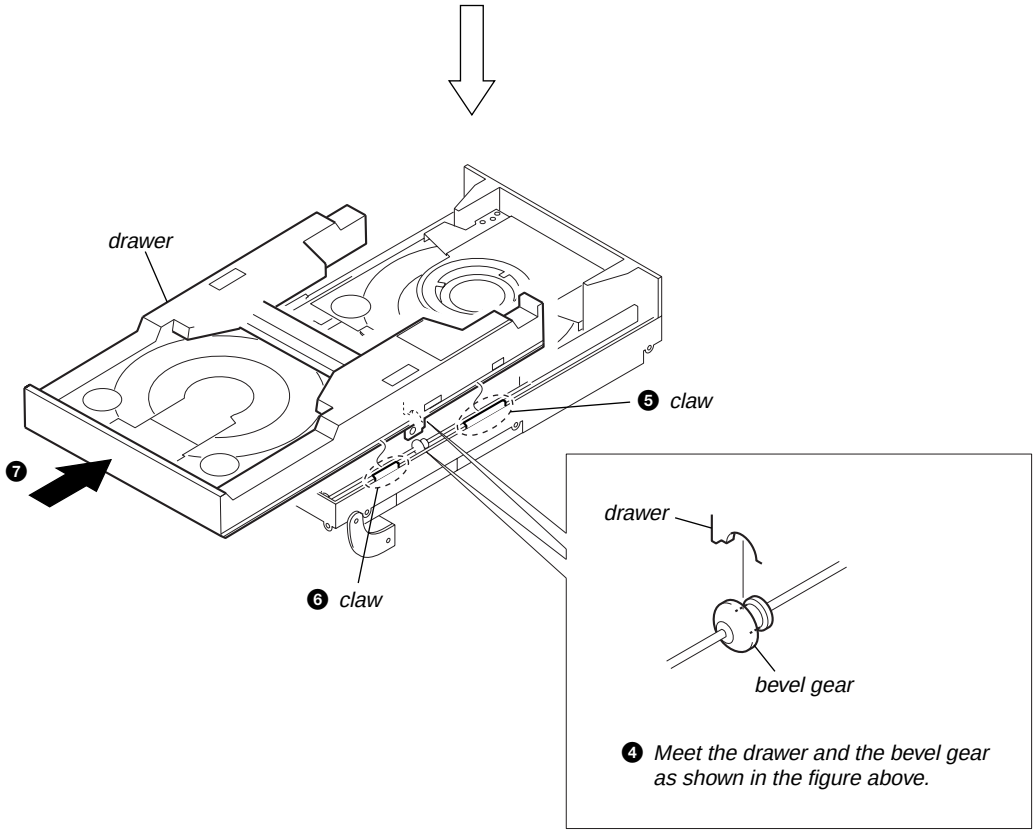


❶ *Push the drawer in the direction of arrow to the chassis as shown in the figure above.*

❷ *Uptilt the right side of the drawer and engage the ditch of the drawer with the claw* Ⓐ.

❸ *Uptilt the right side of the drawer more and engage the ditch of the drawer with the claw* Ⓑ.

Note: After claws are engaged, put the drawer in holizontal position and check that the drawer is loading by moving it back and forth about 5 mm. If the drawer moves a little, redo this procedure.



❹ *Meet the drawer and the bevel gear as shown in the figure above.*

MEMO

REVISION HISTORY

Clicking the version allows you to jump to the revised page.
Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.0	2002.06	New
1.1	2002.09	Addition of "NOTE FOR TRANSPORTING A SET" to SERVICING NOTES (SPM-02082)
1.2	2003.01	Correction of Part No. for Ref. No. 152 (SPM-02122)
1.3	2003.03	Addition of "DISASSEMBLY" and "ASSEMBLY" of CD mechanism deck (SPM-03006)
1.4	2003.06	Correction of Part No. for Ref. No. SW901 on SWITCH board (SPM-03045)
1.5	2003.08	Addition of Ref. No. 60 to EXPLODED VIEWS (SPM-03076)
1.6	2003.10	Change of Part No. for Ref. No. IC201, IC210 on MAIN Board (SPM-03102)
1.7	2004.02	Addition of "NOTE FOR EXCHANGING A CD MECHANICAL (CMCJ-0132)" to SERVICING NOTES (SPM-04007)